# Puzzles, Games, Self-Tesits, Features lure of the labyrinth Tibetan game of Rebirth Tantalizing tessellation 


\%

Sharpen your wits.
Test your knowledge.


6

CR AZ fun
ANS: "got it!"

g. B Simulation

Pencil in GO
Charade

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## THE SHIPTHAT

 BROUGHT AMERICA ITS TASTE FOR SCOTCH.December 5, 1933 was a noteworthy day for Scotch drinkers. For it was the first time in 13 years that drinking it was le gal. Prohibition was repealed.

Perhaps even more noteworthy: it was the day Cutty Sark landed in America. A Scots Whisky already legendary in other civilised parts of the world.

Scotch had been imported into this country before, but had also been largely ignored. Cutty Sark, however, with its particular smoothness, soon captured a large and loyal following of Americans with good taste.

Today, wherever you go in America, you will find the bottle with the famous ship "Cutty Sark" on the label. And the distinctive Scots Whisky inside.

Who would have thought back in 1933 that someday people would be able to cross the United States without changing ships?


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The Cover: A photograph of Rodin's bronze statue Le Penseur (The Thinker) pondering the puzzles in the first issue of GAMES. Design by: For Art Sake, inc.

Scattered throughout this issue you'll find the fragments of a photograph. Can you identify the celebrity who's gone to pieces? If you give up, it's all put together in the Answer Drawer on page 60.


## The Gift With A Future



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## Editor's Message

We think most people get a big kick out of coming up with the solution to a problem-whatever their age, education, income, or fighting weight. It's a satisfying feeling to put one's own resources to work on an honest challenge and master it. Yet so often it seems that trying to play the kind of games we must get into as part of practical, day-to-day living isn't as satisfying as it should be; often the subjects are dull, or the stakes too high, or the rules unclear; sometimes too many pieces are missing, or there is no clear winning answer. A world this complex just doesn't seem to allow people many chances to work things out all by themselves for the sheer satisfaction of doing it right.
You won't find GAMES adding to your worries about real or imaginary problems. There are plenty of people around to do that. (Are the ends of your hairs splitting silently as you sleep? Does your wash dazzle your neighbors?) Nor do we think there's much to be gained by our trying to add even more rules to the living game. (Close cover before striking! Pay total due! Do not fold, spindle, mutilate or park here Mon.-Fri. except 7 p.m. to 8 a.m.l)

So we have collected and devised some puzzles and facts and games and contests and pictures and tests that we think do have some satisfying, constructive fun in them-little bite-sized escapes from the serious business of the life-sized world. We invite you and your family to come play these with and against us, to test your knowledge, sharpen your skills, and keep your mind from bagging at the knees.
You won't find everything easy in here. That's no fun either. So dip into whatever catches your fancy and have a good time with it. The answers are in the back pages. When and whether you peek is your business-nobody's watching.

You may have noticed that we divided the Table of Contents into two sections: Articles and Departments. We plan to repeat most of these same Departments in every issue, and we have some ingenious variations on these themes at our typesetter right now for the next issues. The articles we have in store for you will always be different. We have commissioned some firstrate reading that is now on its way from, for example, P.L. Travers, the author of the Mary Poppins stories; from Fred Pohl, award-winning sciencefiction author; from Jon Carrol of the San Francisco Examiner (on Treasure Hunts); and an extrasensory perception experiment you can try adapted from testing techniques developed by Dr. Rhine at Duke University.

We welcome letters of all kinds. We would appreciate hearing what you liked or didn't, about this issue, and receiving your suggestions for favorite puzzles, tests, games and features that you think our other readers might also enjoy. To make it easier for you to give us your opinion of this premier issue we have bound in a postage-paid reply card. Would you take a minute to fill it in and mail it back? Give it to us straight. Your opinions will help guide our planning of future issues.

Speaking of writing to us, in the masthead we have listed the names and addresses of some of the people you may want to write to: letters to the editor, change of address, billing questions, advertising and the like.

We are having a good time coming up with new ways to intrigue and stump you. We hope you will find this magazine too much fun to keep-that you'll write all over it, take it on a trip or to a party, give it to your children, loan it to a sick friend, sweat over it, chuckle at it and chew on it until you are both worn out.

Your play! And good luck with your contest entries.


Allen D. Bragdon

Editor-in-Chief

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# "Harold," she whispered softly,"I never knew what a winner you were!" 

It was late at night and soft jazz music filled the air. Everyone had just left the smoke filled dining room where the potted palms were wilting slowly.
"Harold," she said, "you saved my party!" A tear of gratitude welled up in her left light blue eye.
"It was really the Rail Baron game," Harold answered modestly.
"Yes," she said, "It's really loads more fun than cards, much more social than charades. Actually, I've never had such a splendid time."
"Indeed." Harold agreed. "I love you, Gloria, but I know at a party you are two left feet when it comes to dancing. So, naturally, being considerate of you, I brought the Rail Baron game to your party.


## Eyeball Benders

## What are these objects?

 Answer Drawer, page 6020-23 correct: Fourteen carrots; 16-20: Apt pupil; 11-15: Heavy blinker, 5-10: Optic nervous; 0-4: Take off your sun-
glasses. glasses.

6. A hole in one

12. Mac masher

18. Afrodishiac


1. Hot dogger's handle

2. Under your nose

3. Rules of the grain

4. Road blocks

5. Three strikes and you're out!

6. Noah's niches

7. The "Doctor's" jumpers

8. Conestoga mags

9. Pen pushers
10. "Lend us your ears"
11. Hawaiian gold
12. Good vibrations


13. Spinning wax

14. Hot and cold flashes

15. Betsy Ross' lorgnette
16. Stronger than dirt


17. Hiawathan fiberglass

18. Havana honers

19. Southern comfort

20. Blown cover


One of the favorite features of the elaborate gardens at Williamsburg's Governor's Palace is the holly maze patterned after the maze at Hampton Court in England.

# THE LURE OF THELABYRINTH 

by Laura King Palmer

Mazes have captured man's fancy for thousands of years. Perhaps the most famous of ancient mazes was the deadly Minotaur labyrinth in Crete.
Built by King Minos at the Cretan capital, Knossos, the Minotaur labyrinth was to be the site for sacrificial tribute in memory of the king's son, Androgeos, who had been treacherously slain in Attica. At nine-year intervals, Athens was required to send seven youths and seven maidens to Knossos. These 14 hapless souls were then released in the tortuous labyrinth designed for Minos by the crafty engineer, Daedalus. With escape almost impossible, victims inevitably wandered to the maze's center, there to encounter its cruelest surprise. For the maze was inhabited by the hideous Mino-


This is a version of the legendary labyrinth which the Cretan Daedalus built.
taur, half-man, half-bull, the mutant offspring of Minos' queen. The Minotaur devoured youth and maiden alike for 18 years. In the 19th year, just before the third sacrifice was due, the intrepid Theseus, Prince of Athens, voluntarily joined the group bound for their demise. Theseus vowed to slay the savage Minotaur, and thus free Athens of its debt.

Upon arrival at the court of Minos, Theseus had the rare fortune to find favor in the eyes of Ariadne, Minos' lovely daughter. She secretly supplied the prince with a sword and a skein of thread before his descent into the labyrinth. With these material advantages and a good ration of pluck, Theseus slayed the Minotaur and successfully emerged from the labyrinth, reversing the route he had cunningly marked by unrolling the thread on his way in. His escape released Athens from its gruesome obligation.

The story of Theseus and the Minotaur may be entirely apocryphal, but it has had great appeal throughout the ages. The Minotaur maze is often used as a symbol for the twisting, treacherous paths of fortune in life and love.

Most mazes don't have the frightening aspect of the Minotaur labyrinth. Hedge mazes suggest pastoral amusement, an entertaining stroll in a country setting, stone benches provided for secluded sunning or a midnight rendezvous. Finding
your way should be fun, not frantic. Certainly that was the intention of the topiary genius commissioned by Louis XIV to create a maze at Versailles. With money no object, it's not surprising that Louis' maze ranked as one of the most extravagant ever built.

Within the maze, 39 groups of fountain statuary depicted various of Aesop's fables. Gigantic figures of Aesop and Cupid marked the entrance, Cupid suggestively brandishing a ball of string. Each of the fable characters with a speaking role spouted a jet of water from its mouth. And a bronze plaque at the base of each fountain told its tale in verse. Water for the fountains was pumped three-quarters of a mile from the Seine by an elaborate device known as the "Machine de Marli." Built about 1680 , this mechanical wonder consisted of 14 waterwheels and 253 pumps. The system cost over $\$ 3$ million to build and lasted less than 100 years. The labyrinth was destroyed in 1775 .
Many of the Sun King's contemporaries shared his mania for mazes, though not everyone built them for pleasure. While Louis dallied in his labyrinthine playground, the German Prince of Anhalt constructed a maze designed to be an allegory of human life. Box hedges were supplemented with trees and rocky grottoes, streams, and caverns. Twisting paths cut deeply into the undergrowth

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Not the least of the labors of Hercules was to obtain possession of the Sacred Apples in the Garden of the Hesperides. They were protected by the dragon, Ladon, but an even greater obstacle was presented by the frailty of the apple trees. A 200 -pound man may easily kill a dragon, but he may not climb
a tree to the height of a rook's nest without risk. Yet Hercules got this apple from the very top of the tree. To find the way Hercules climbed the tree, start at the bottom of the trunk and ascend the branches, but you may not cross a line.
and were poorly lighted, to heighten the challenge. Plaques describing alarming allegories were posted at frequent intervals along the route. Of course, life is not utterly devoid of charms, and the traveler was graced at occasional turnings with flower-strewn vistas and elegant sculpture.


## A German maze

The maze enjoyed its greatest popularity in England. William III built a lovely labyrinth at Hampton Court which survives to this day and is a favorite tourist attraction. William's maze was entirely pleasure oriented and originally allowed for amusing encounters within by the use of blossom-laden trellises at points along the path. Thus, though unable to join forces, bewildered wanderers could at least commiserate through flowery chinks in the labyrinth walls.

As mazes are designed with intentions ranging from innocent amusement to
consummate devilry, their routes are accordingly planned. The simplest mazes do not even allow for misturnings. The visitor simply threads his way through at any chosen pace. More elaborate mazes wind back and forth upon themselves and provide many a cul de sac. Mazes can take a variety of forms, limited only by the ingenuity of the designer. The Pimperne maze in England was designed to recreate a pilgrim's journey. Since a pilgrimage is undertaken for love, the Pimperne maze was constructed in the shape of a heart.

The hedge mazes of recent centuries may have been easier to produce than the stone forms built by ancient peoples, but keeping them up is considerably tougher. Hedges of privet, holly, or hawthorn require constant pruning and


The Pimperne maze
patching to maintain their mysteries. That's probably why, for the most part, mazes have gone the way of hoop skirts.

But if you yearn for a glimpse of those baffling boxwoods, there are still a few hedge mazes around. One of the best examples in this country is at Colonial Williamsburg. Visitors there will experience that aspect of the maze you can't get from pictures. It's one thing to put pencil to paper and chart one's escape from a picture maze. But a dense privet hedge towering ten feet above you presents a three-dimensional challenge that's another kind of fun.

## Losing your way in two dimensions

The Minotaur maze has long since gone to dust, but here's consolation. The color mazes on these pages were specially designed for the first issue of GAMES. Lovely to look at, devilish to divine, these latter-day mazes might have foiled Theseus himself. But for those who dismiss the picture maze as child's play, we have a suggestion. Try following these mazes through a dime-size hole punched in a sheet of heavy paper or cardboard. Livens things up, doesn't it?
Answer Drawer, page 60.

8

## Snakebite

Brusher Mills was a famous character in the New Forest, England, half a century ago. His job was to catch snakes, and he used to supply the zoo with upwards of two hundred a year for feeding to the hamadryads. He used to catch his adders with his finger and thumb, seizing them by the neck or tail.

Here is a nest of adders, one of which is showing his head. This adder's tail is one of the three on the circumference of the circle, but before you seize it you must make sure it is the right one. If you take hold of the wrong tail, an unsuspected head may pop out somewhere and give you a bite.

The Rainbow Maze
When sunlight hits raindrops they scatter and sometimes a rainbow appears. Some rays of light bounce off the droplet, some pass through, but some of the rays enter and careen around inside before they finally emerge at different angles. In this maze imagine that one, and only one, crazy ray is lucky enough to find its way out. Can you trace its path, starting at the $X$ in the upper right corner and ending at the lower left.



# REBIRTH 

## The Tibetan Game of Liberation

A central feature of the Tibetan Buddhist world view is the idea of personal evolution through the struggle to achieve Buddhahood or nirvana: enlightenment and liberation from the needless suffering caused by ignorance of one's own true nature. The struggle is envisioned as taking place over countless thousands of years, during which time the individual is born, lives, and dies many times over. He may be reincarnated each time in any one of a number of different forms: a human being, an animal, an asura (demon or titan), a god, a plant. The forms of one's lives, including both the


Sakya pandita Kunga Gyaltsen.
outer conditions and the inner tendencies, are strictly determined by one's karma, a force generated by former and present actions, words, and even thoughts. There is help along the way in the form of special teachings, such as the Tantra or the Mahāyāna scriptures. The journey toward nirvana, far from being optional, is a duty, a necessity of the universal order or dharmathe body of basic principles upon which cosmic and individual existence are based. So, as the Buddhists might say, this is a game we play whether we like it or not and whether we know it or not.
The article that follows, presenting a game based on the "game," is excerpted and adapted from the book REBIRTH: THE TIBETAN GAME OF LIBERATION by Mark Tatz and Jody Kent. Copyright ${ }^{\odot} 1977$ by Jody Kent. Published by Doubleday d Company, Inc.

What distinguishes Rebirth from other board games is the curious fact that, even when pitted against the most fiercely competitive players, one just can't help wishing one's "opponents" well.
The Game of Rebirth reveals the Tibetan Buddhist map of the universe. The scroll painting or "board" shown opposite lays out a cosmic geography, presenting

[^0]
one's possibilities of future rebirth, and demonstrates the paths to liberation and the forms of enlightenment. In the course of playing this game the players' tendencies toward certain destinations are revealed, and guidelines are presented for their transcendence of ordinary existence and attainment of future states that are free from suffering.
Rebirth was invented in the early part of the thirteenth century by Sakya pandita Kunga Gyaltsen ("Whose Banner is Total Joy"), the great Sanskrit scholar of the Sakya sect. He created it to amuse his ailing mother, for it was considered un-healthy-even for the sick-to sleep during the day.
Later, Tibetans regarded it as an educational game, inculcating in children the Buddhist map of the world and an understanding of the workings of karma. It was also enjoyed as an amusement, and played by young and old, lay and monastic, with great merriment and jesting at the karmic tendencies that are revealed by the cast of the die. Tibetans were very fond of games of dice, and often there was betting on the outcome. In monasteries it was enjoyed on holidays by the elders, and by the young during long afternoons following rituals and study. Mr. Thubten Norbu, elder brother of the present Dalai Lama, describes how it was played during his childhood at school:

The winner was rewarded with a prize of sweets. Sometimes such a game would last for hours, and occasionally it would get very noisy. Particularly fortunate or unfortunate throws were greeted with a chorus of congratulations or groans as the case might be.*

Laypeople were especially fond of playing the game during the summer picnic and camping holidays by the rivers. It is still enjoyed in the Tibetan-culture areas of Sikkim and Bhutan and by refugees in various parts of the world. Tibetans who have not seen the game since exile greet its sight or mention with a laugh and a smile, as though at the memory of happier days.
*Thubten Norbu, Tibet Is My Country, as told to
Heinrich Harrer, trans. Edward Fitzgerald, (Lon-
don: Hart-Davis, 1960), p. 93 .

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| $\begin{gathered} 88 \\ \text { FIFTHSUTRA } \\ \text { STAGE } \\ \text { ONE }-95 \\ \text { TWO }-87 \end{gathered}$ | $\begin{gathered} \text { B7 } \\ \text { SITTHSUTRA } \\ \text { STAGE } \\ \text { ONE } \\ \text { TWO }-86 \end{gathered}$ | $\begin{aligned} & \text { SEV } \\ & \text { SEVENTH SUTRA } \\ & \text { STAGE } \\ & \text { ONE } \rightarrow 95 \\ & \text { TWO } .96 \end{aligned}$ | $\begin{gathered} 85 \\ \text { REALMOF } \\ \text { SUPERJOY } \\ \text { ONE二 } 71 \\ \text { TWO } 77 \\ \text { THREE } \Rightarrow 76 \end{gathered}$ | $\begin{gathered} \text { n4 } \\ \text { SUPREME } \\ \text { SEAVEN } \\ \text { ONE } \rightarrow 93 \end{gathered}$ | 83 SEVENTH TANTRA STAGE $\begin{aligned} & \text { ONE } \rightarrow 84 \\ & \text { TWO }+91 \end{aligned}$ | 82 <br> SIXTHTANTRA STAGE $\begin{aligned} & \text { ONE } \rightarrow 89 \\ & \text { TWO } \rightarrow 90 \end{aligned}$ | 31 <br> FIFTH TANTRA STAGE ONE-83 TWO -89 |
| 80 SECOND SUTRA STAGE ONE-78 | 79 <br> third sutra STAGE $\begin{aligned} & \text { ONE- } 88 \\ & \text { TWO- } 78 \end{aligned}$ | 78 <br> FOURTH SUTRA STAGE $\begin{aligned} & \text { ONE } \rightarrow 87 \\ & \text { TWO } \rightarrow 88 \end{aligned}$ | $\begin{gathered} 77 \\ \text { LAND OF BLISS } \\ \text { ONE } 71 \\ \text { TWO } \rightarrow 74 \end{gathered}$ | 76 <br> AEALM OF JEWELED PEAKS ONE $\rightarrow 78$ THREE $\rightarrow 73$ | 75 <br> FOURTH TANTRA STAGE $\begin{aligned} & \text { ONE } \rightarrow 82 \\ & \text { TWO } \rightarrow 83 \end{aligned}$ <br> THREE - 81 | $\begin{gathered} 74 \\ \text { THIRTARTANA } \\ \text { STAGE } \\ \text { ONE } ; 75 \\ \text { TWO } ; 81 \end{gathered}$ | $\begin{gathered} 73 \\ \text { SECOND TANTRA } \\ \text { STGE } \\ \text { ONE }-75 \\ \text { TWO } \quad .81 \\ \text { SIX } \rightarrow 69 \end{gathered}$ |
| $\begin{aligned} & 72 \\ & \text { WISDOM-HOLDER } \\ & \text { OF THE EIGHT } \\ & \text { SIDDHIS } \\ & \text { ONE }+67 \\ & \text { TWO }+41 \\ & \text { THREE } \rightarrow 33 \end{aligned}$ | $\begin{gathered} 71 \\ \text { FIRST SUTRA } \\ \text { STAGE } \\ \text { ONE } 79 \\ \text { TWO } \mathbf{7 9 0} \\ \text { THREE } \rightarrow 74 \end{gathered}$ | $\begin{gathered} 70 \\ \text { REALM OF } \\ \text { ACTICN } \\ \text { COMPLETION } \\ \text { ONE } \\ \text { TWO } 73 \\ \text { FOUR } 73 \\ \text { FIVE } 34 \\ \text { S:X } \rightarrow 71 \end{gathered}$ | 69 <br> TANTRIC WHEEL TUPNING KING ONE -75 TWO- | $\begin{aligned} & \text { 68 } \\ & \text { WISDOM-HOLDER } \\ & \text { OFTHEREALM OF } \\ & \text { FOMM } \\ & \text { ONE }-42 \\ & \text { TWO } \rightarrow 49 \\ & \text { FON }-59 \\ & \text { SIX }-41 \end{aligned}$ | 67 <br> WISDOM-HOLDER AMONG THE GESIRE <br> ONE TWO $\mathrm{H}_{42}$ <br> THREE $\rightarrow 68$ <br> FOUR $\rightarrow 69$ | 66 FIRSTTANTRA STAGE ONE $\rightarrow 74$ THRE 773 |  |
| 64 <br> MAHĀYÄNA, PATH OF APPLICATION: HIGHEST TEACHINGS" $\begin{aligned} & \text { ONE } \rightarrow 71 \\ & \text { TNE } \\ & \text { FIVE } \rightarrow 79 \end{aligned}$ | 63 <br> MAHÄYĀNA, PATH OF APPLICATION: ONE $\begin{aligned} & \text { ONE }-85 \\ & \text { TWO } \rightarrow 42 \end{aligned}$ <br> THREE $\rightarrow 64$ <br> FOUR $\cdot 77$ | 62 <br> HINDU WISDOMHOLDER <br> ONE +52 TWO -38 | $\begin{gathered} 61 \\ \text { URGYAN } \\ \text { ONE- } \\ \text { TWO } \\ \text { THREE }-84 \end{gathered}$ | $\begin{aligned} & { }^{60} \\ & \text { POTALA } \\ & \text { ONE }-64 \\ & \text { THO } \\ & \text { THEE } \rightarrow 42 \end{aligned}$ | 59 <br> SHAMBHALA ONE $\rightarrow 63$ TWO $\rightarrow 50$ HPEE $\rightarrow 60$ FOUR $\rightarrow 49$ SIX -55 | 58 <br> TANTRA, PATH OF APLIGATEST: "HIGACEST $\begin{gathered} \text { ONE } \rightarrow 73 \\ \text { THRO } 74 \\ \text { THEE } 6.66 \\ \text { FOUR }-85 \end{gathered}$ | 57 <br> TANTRA, PATH OF APPLICATION: $\begin{gathered} \text { "RECEPTIVITY" } \\ \text { ONE } \rightarrow 66 \\ \text { TWO } \rightarrow 73 \\ \text { THMEE } \rightarrow 58 \\ \text { FOUR } \rightarrow 77 \end{gathered}$ $\text { FOUR } \rightarrow 77$ |
| 56 <br> MAhĀYĀNA, PATH OF APPLICATION: "CLIMAX" $\begin{aligned} & \text { ONE } \rightarrow 64 \\ & \text { TWO } \rightarrow 63 \end{aligned}$ | 55 <br> MAHAYYĀNA, PATH OF APPLLICATION: "HEAT" $\begin{aligned} & \text { ONE }-63 \\ & \text { TWO }-56 \end{aligned}$ | 54 <br> MAHAYĀNA GREATER PATH AF $\begin{gathered} \text { OF } \\ \text { ACUMULATION } \\ \text { ONE } \rightarrow 63 \\ \text { TWO }+55 \\ \text { THREE } \rightarrow 60 \\ \text { FOUA } \rightarrow 59 \end{gathered}$ |  | 52 <br> MAHĀYĀNA. AESSER PATH OF $\begin{array}{r} \text { ONE } \rightarrow 54 \\ \text { TWO }-53 \\ \text { THEE } 30 \\ \text { FOUR }-38 \\ \text { FIVE } \rightarrow 11 \\ \text { SX } \rightarrow 7 \end{array}$ | $\begin{gathered} 51 \\ \text { DISCIPLES, } \\ \text { ARATSHIP } \\ \text { ONE } \rightarrow 52 \\ \text { TWO } 48 \\ \text { THREE }-37 \end{gathered}$ | 50 TANTRA, PATH OF AAPLICAITN: "CLIMAX" ONE $=57$ TWO -66 | 49 <br> TANTRA, PATH OF <br> APPLICATION: "HEAT" $\begin{aligned} & \text { ONE } \rightarrow 50 \\ & \text { TWO } \rightarrow 57 \end{aligned}$ |
| $\begin{gathered} 48 \\ \text { CESSATION } \\ \text { ONE } \rightarrow \text { ONCE } \\ \text { TWO } \rightarrow \text { TWICE } \\ \text { THREE } 3 \text { TIMES } \\ \text { FOUR } \rightarrow 4 \text { TMES } \\ \text { FIVE } \rightarrow 5 \text { TIMES } \\ \text { SIX } \rightarrow 6 \text { TMES } \\ \text { GO TO } 52 . \end{gathered}$ | 47 <br> INDEPENDENT BUDDHA ARHATSHIP <br> ONE -52 <br> THREE $\rightarrow 30$ <br> FOUR $\rightarrow 37$ |  | $\begin{gathered} 45 \\ \text { INDEPENDENT } \\ \text { BUDDHA, PATH OF } \\ \text { VISION } \\ \text { ONE } \rightarrow 52 \\ \text { TWO } \rightarrow 47 \\ \text { THREE } \rightarrow 46 \\ \text { FOUR } \rightarrow 40 \\ \text { FIVE } \rightarrow 17 \\ \text { SIX } \rightarrow 28 \end{gathered}$ |  |  | 42 <br> TANTAA GREATER PATH af acumulation $\begin{aligned} & \text { ONE } \rightarrow 49 \\ & \text { TWO } 50 \\ & \text { SIX } \rightarrow 59 \end{aligned}$ | $\begin{gathered} 41 \\ \text { TANTRA, MIDDEE } \\ \text { PATH OF } \\ \text { ACCUMULATION } \\ \text { ONE } \rightarrow 60 \\ \text { TWO }-42 \\ \text { THREE } 59 \\ \text { FIVE } \rightarrow 67 \\ \text { SIX } \rightarrow 33 \end{gathered}$ |
|  |  | 38 DISCIPLES, PATH OFCUMLATION ACUMUL ONE 37 TWO $=40$ THREE 39 FOUR 39 FIVE SIX SI |  | 36 THE FORMLESS REALM ONE-38 TWO=17 THEE=11 SIX 4 |  | $\begin{aligned} & 34 \\ & \text { MAHĀKĀLA } \\ & \text { ONE } \rightarrow 61 \\ & \text { TWO } \rightarrow 81 \\ & \text { THREE } \rightarrow 70 \end{aligned}$ | 33 TANTRA, LESSER PAATOF ACUMULATION ONE TNE 41 FIVE $=12$ SIX $\rightarrow 1$ |
| $\begin{aligned} & \text { D2 } \\ & \text { RULINGTHE } \\ & \text { EMANATINS OF } \\ & \text { OTHESS } \\ & \text { ONE }-30 \\ & \text { TWO-35 } \\ & \text { TREE }-18 \\ & \text { FOUR } 18 \\ & \text { FIVE }-10 \end{aligned}$ |  | 30 <br> THE JOYFUL HEAVEN $\begin{array}{r} \text { ONE } \rightarrow 64 \\ \text { TWO } \rightarrow 63 \\ \text { THREE } \rightarrow 55 \\ \text { FOUR }=54 \\ \text { FIVE } \rightarrow 53 \\ \text { SIX } \rightarrow 52 \end{array}$ | 29 <br> HEAVEN WITHOUT FIGHTING $\begin{array}{r} \text { ONE } \rightarrow 30 \\ \text { TWO } 31 \\ \text { THRE }+17 \\ \text { FOLE } \\ \text { FIVE } 12 \\ \text { SIX }-10 \end{array}$ | 28 <br> HEAVEN OF THE THIRTY-THREE <br> ONE $\rightarrow 29$ TWO $\rightarrow 17$ <br> THREE -20 <br> FOUR $\rightarrow 22$ FIVE $\rightarrow 11$ <br> SIX • 7 |  | 26 WHEE KING |  |
| 24 <br> THE HEAVENLY HIGHWAY <br> ONE $\rightarrow 27$ <br> TWO $\rightarrow 17$ <br> FOUR $\rightarrow 11$ <br> FIVE -10 <br> SIX $=6$ | $\begin{gathered} 23 \\ \text { BǑN } \\ \text { ONE } \\ \text { TWO } 52 \\ \text { THRE } 65 \\ \text { FOUR } 29 \\ \text { FOUE } 27 \\ \text { FIX } \\ \text { SIX } \end{gathered}$ |  | $\begin{gathered} 21 \\ \text { BARBARISM } \\ \text { ONE } \rightarrow 15 \\ \text { TWO } \quad 62 \\ \text { THREE } 19 \\ \text { FOUR } 11 \\ \text { FIVE } 10 \\ \text { SIX }-2 \end{gathered}$ |  | $\begin{gathered} 19 \\ \text { THE ASTERN } \\ \text { CONTNENT } \\ \text { ONE } 43 \\ \text { TWO }-38 \\ \text { THAEE } 13 \\ \text { FOUR } 15 \\ \text { FIVE } 13 \\ \text { SIX } \rightarrow 11 \end{gathered}$ |  | 17 THE SOUUHERN CONTNENT ONE-52 TWO THEE 25 FOUR 26 FOUE 38 FIVE-22 SIX |
| $\begin{gathered} 16 \\ \text { RUDRA-BLACK } \\ \text { FREEDOML } \\ \text { TWO }-34 \end{gathered}$ |  | $\begin{gathered} 14 \\ \text { DEMON ISLAND } \\ \text { ONE } 25 \\ \text { THO }-42 \\ \text { THREE } \\ \text { FOUR } 17 \\ \text { FIVE }-5 \\ \text { SIX } \rightarrow 3 \end{gathered}$ |  | $\begin{aligned} & 12 \\ & \text { DIVINE ANIMALS } \\ & \text { ONE }-28 \\ & \text { TWO } \\ & \text { THEE } 27 \\ & \text { FOEE }-21 \\ & \text { FIVE }-11 \\ & \text { SIX }-10 \end{aligned}$ | $\begin{gathered} 11 \\ \text { ANIMALS } \\ \text { ONE } 27 \\ \text { TWE } 17 \\ \text { THREF } 17 \\ \text { FOUR } 12 \\ \text { FVE } 13 \\ \text { SIX } \rightarrow 5 \end{gathered}$ | 10 HUNGY GHOSTS (PRETA) ONE 19 TVO THREE 13 FOUR 14 FINE FIV SIX | $\begin{gathered} g \\ \text { LORD OFTHE } \\ \text { DEAD (YAMA) } \\ \text { ONE } \rightarrow \text { 42 } \\ \text { TWO } \rightarrow 34 \end{gathered}$ |
|  | $\begin{gathered} 7 \\ \text { THE COLD HELLS } \\ \text { ONE } 15 \\ \text { TWO. } 18 \\ \text { THEE } \\ \text { FREF } 11 \\ \text { FONE. } 10 \\ \text { FVE } \\ \text { SIX } \rightarrow 5 \end{gathered}$ | E <br> REVIVING HELL <br> ONE +17 <br> TWO <br> THEE +10 <br> FOUE <br> FIVE <br> SIX <br> SIX |  |  |  |  | $\begin{aligned} & 1 \\ & \text { VAJRA HELL } \\ & \text { ONE } \rightarrow \text { ONCE } \\ & \text { TWO } \text { TWIGE } \\ & \text { THREE } 3 \text { TIMES } \\ & \text { FOUR二 } 4 \text { TIMES } \\ & \text { FIVE } 5 \text { TIMES } \\ & \text { SIX } \rightarrow 6 \text { TIMES } \\ & \text { GO TO } 9 . \end{aligned}$ |

The present version, with 104 squares, was painted by Pema Dorje, a young layman of a Nyingma family living in India. [An English translation appears opposite. This is the recommended playing board for non-Tibetans.]

## Object of the Game

Each player begins in the "human realm," moving in accord with the cast of a die. Depending on one's karma, one proceeds upward or downward on the board into higher or lower states of rebirth, mapping out the potential destinations of one's future lives. The main classes of living beings in the world and the various regions and philosophies of humanity are in the lower rows. One may be reborn among the classes of gods or demons, ghosts or animals, or in one of the hells. The object of the game is to enter one of the paths to enlightenment and follow it successfully to the top. On the way are magic lands, high meditative states, and tantric attainments. The winner is the first to reach Buddhahood and enter nirvana.

## Rules of Play

Any number can play. The start is Square No. 24, "The Heavenly Highway." Each player places a small token on this square. The low roll of the die moves first.
Throwing the die, the first player moves to the designated square. For example, a "two" moves to Jambu Island (square No. 17 on the board). Then the die is passed clockwise to the next player. If this player casts "four," he is born an animal (square No. 11), and passes the die again to the left. On his next move, [if Player 1 should throw a "two" again, he would start] the tantric path (square No. $25)$, and so forth.

Ten "two's" in a row take one to Dharma body (square No. 93) and full Buddhahood via the tantric path. Ten "one's" from the beginning take one to the same place by way of the Mahāyāna. In a number of squares not all six numbers cause a move. The player throwing one of these "dead" numbers stays there another turn [until he rolls one of the numbers that are listed].

Two of the squares, Cessation in the Vehicle of the Disciples (square No. 48) and Vajra Hell (square No. 1), are traps. Here one must throw "one" once, "two" twice, "three" three times, and so forth through all six numbers [in no particular order]. However, one may keep throwing in the same turn until a number comes up that one does not need. So the player in such a trap should check off the numbers needed as they are thrown, and stop throwing only when he gets one he doesn't need. If, for example, he starts off by throwing two "one"s in a row, he quits after the second and waits until his next


Othello. The game of games.

## Gabriel ${ }^{\text {® }}$

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turn. [If he then throws yet another "one," he must again pass to the next player; but on any other number, he continues throwing.]
The winner is the first to reach nirvana (square No. 104). From there your token is passed to the stūpa [memorial shrine] above and becomes the object of reverence and devotion.

## Explanations of the Squares

A lengthy explanation of each square is provided by Tatz and Kent in the Doubleday edition. For example, the complete commentary for the starting square, number 24 , the heavenly highway, is:

We are at the start of the game, in the present human existence, confronted with six roads of different colors. The fall of the die takes us to one of the six karmic destinies: white for the gods, blue for humans, green for animals, yellow for ghosts, black smoke for the hells, and red for the jealous asuras. But karma is not fate; it means activity. Deeds of body, speech, and mind will determine our destination.
The opportunity has arrived, so hard to obtain,
for accomplishing the welfare of living beings;
If I fail to take advantage of it,
When will the chance come again?

Of the lowest hell, square 1, it is said: Here the fierce dharma protectors turn upon one in wrath. This is a hell of the most frightful demonic images, the most fearful hell, for its suffering is paranoia rather than physical pain-difficult for anyone else to assuage. Fear for oneself makes it almost impossible to see through the images and escape.

And, on entering nirvana, square 104, we read: The earth shakes, stars fall, and rainbows and music fill all the quarters of space.
//Sarva-mangalam—Good Luck to All//
$\qquad$


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## Facts of Science

You don＇t have to be turned on by ergs and amps to enjoy these practical puzzles．Common sense will come in handy if your high school science is a little rusty．For the answers，turn this page upside down．

## I．

TRUE or FALSE：Circulation of the air by an electric fan lowers the tem－ perature of a hermetically sealed room．

## II．

TRUE or FALSE：To obtain maximum energy efficiency，the flame of a gas stove should be adjusted so that it burns a steady white．

III．
Of the following ways in which a dish－ washer consumes energy，which proc－ ess uses the most energy？A）Motor circulation of water during the wash and rinse cycles．B）Heating of water by the independent home water－heat－ ing unit in the basement．C）Further heating of water by heating element in the dishwater．D）Drying of dishes by heating element．

## IV．

TRUE or FALSE：The weight of an object at sea level is greater than the weight of the same object on a moun－ tain peak 15,000 feet above sea level．

## V．

TRUE or FALSE：As viewed by an ob－ server on earth，the tail of a comet in－ dicates the direction of the comet＇s path．

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Dr. Gini Scott, our game reviewer, is a successful game designer and has been evaluating games for several years. She personally plays all the games she reviews and has developed a useful rating system. Games are judged in several categories on a scale of 1 to 5 , with 5 being the highest. The games we've included here have received Dr. Scott's highest ratings.

Have you been out shopping for new games lately? Then you've noticed that Monopoly is far from the only game in town. In fact, there are so many games around that you need a scorecard to keep track. The seven games you'll find described here are recent arrivals. Each has certain elements which make it a little unusual. Beyond Words comes in book form. Nourish and AC/DC are truly educational in addition to being fun. Several, including Othello, Feudal, and Whosit? are classical favorites with a twist. If you've been looking for a great gift or a fun idea for your own evenings at home, you may find your inspiration here.
Othello around $\$ 9$ from Gabriel Industries, 200 Fifth Avenue, New York, NY 10010.

Othello is one of the most popular games around today. After sweeping Japan, it has recently been licensed in the U.S. and is now making a commercial sweep here too. The excitement is certainly justified, since Othello is an excellent game. But ironically, Othello is virtually the same game as Reversi, with a few minor rule changes, and Reversi has been around for a long time--from Victorian times in England in fact. Moreover, Reversi has been introduced in various forms in the last few years by assorted publishers, including Mattel (as Turning Point), and by Four Generations and Products of the Behavioral Sciences as Reversi. In these previous incarnations, it never really took off. But now, with masterful packaging, a history of record sales in Japan, a lot of promotion, and a new name, Gabriel has made the game go. (Not Go.) The game Othello/Reversi is a very simple and elegant one, which permits much opportunity for strategy. The game is played on an $8 \times 8$ matrix, and each player has 32 playing discs, which are white on one side, black on the other. One player plays black; the other white. Four starter discs are placed in the center of the board to begin play. Then each player in turn places one disc on the board with his color up and must oufflank the opposition by surrounding one or more rows of his opponent's discs (there can be one disc in a row) with discs of his own color. After doing so, he flips each of the outflanked discs to his color. And that's all there is to the rules. The winner is the player with the most discs of his color on the board when all the discs have been played. The strategy comes in planning where to outflank to flip the most discs or to maneuver pieces to the strongest power positions on the board. An excellent, highly recommended game. Even if it is a virtual copy of an old game, this is the best presentation of Reversi I've seen.
(Editor's Note: As part of their grand scale promotion, Gabriel Industries imported the Japanese national Othello champion, Fumio Fujita, to play demonstration games across the U.S. He even played against a computer programmed for Othello at Cal Tech. On the other side of the Atlantic, Dr. N.J.D. Jacobs of Geneva has prepared a similar computer challenge for Reversi. He has offered to refer

GAMES readers to the 15 or so computers in the U.S. which will soon be running his program. For information, write: Dr. N.J.D. Jacobs, CERN, CH 1211 Geneva 23, Switzerland.)

Complexity: 2; Degree of Strategy: 5; Skill Level: 1; Adequacy of Rules: 4; Originality: 2; Presentation: 5; Durability: 5; Replayability: 5

Boggle around $\$ 6$ from Parker Brothers, 190 Bridge St., Salem, Mass. 01970.

This is a fast-moving word-game race in which players try to find as many words as possible in a $4 \times 4$ arrangement of letter cubes, using only adjoining letters in sequence. Boggle has adapted the familiar find-a-word format into a quick, easy-to-learn, and challenging game for 2-6 players. Boggle can be played again and again, as the letter cubes are shaken and reset before each round. After the toss, everyone races to discover as many words as possible and compiles a list of them. When all duplicates among players have been eliminated, the player with the longest list wins. Reportedly, the game is now very popular in New York, and that's not surprising. It's a good, well-presented game.

Complexity: 2; Degree of Strategy: 5; Skill Level: 1; Adequacy of Rules: 5; Originality: 3; Presentation: 5; Durability: 5; Replayability: 5

## Nourish around \$7 from Fun With Food, P.O.

 Box 954, Beimont, CA 94002.Designed by two professional nutritionists, Nourish is a series of card games about nutrition. These games are largely variations on classic card games like Gin, War, Hearts and Crazy Eights, but they are played with a special deck of cards. Each card lists a food and various nutritional information. Players attempt to acquire various assortments of nutriments. For example, in "Nourish and Flourish," which is played like Gin, each player tries to collect a certain number of cards from each of the four main food groups-milk, meat, fruit, and vegetables. (And in case you don't know the food groups, there's a chart to tell you what food belongs where.)

The game book lists 11 games that can be played by 1-20 players, depending on the game. Nourish is a delightful way to learn about food.

Complexity: 3; Degree of Strategy: 1-3; Skill Level: 1-2; Adequacy of Rules: 5; Originality: 4; Presentation: 4; Durability: 5; Replayability: 4-5

Feudal around $\$ 10$ from Avalon Hill, 4517 Harford, Baltimore, MD 21214.
A chesslike game in which two players maneuver pieces representing Medieval royal and military ranks. Unlike chess, each player secretly deploys his men in his kingdom before the game starts. A screen is used for this purpose, then removed before the battle.
Complexity: 4; Degree of Strategy: 5; Skill Level: 2; Adequacy of Rules: 5; Originality: 5; Presentation: 5; Durability: 5; Replayability: 5

Whosit? around $\$ 7$ from Parker Bros., 190 Bridge St., Salem, MA 01970.

This is a simplified deduction game in the Clue-Sleuth family. The twist to Whosit? is that certain players, representing mystery characters, are permitted or required to lie about their identities. Twenty assorted character cards means that any number can play. Sample characters include a rock star, a spy, a censor, a gangster and a starlet. Players use question cards to make queries. The winner is the first to correctly guess the identities of all the other players in the game.

Complexity: 3; Degree of Strategy: 3; Skill Level: 1-2; Adequacy of Rules: 5; Originality: 4; Presentation: 5; Durability: 5; Replayability: 4
AC/DC around $\$ 4$ from Ampersand Press, 2409 McGee Ave., Berkeley, CA 94703.
You guessed it! A game about electricity. Using cards that represent various energy sources, users, connectors, fuses, and switches, each player (2-4) tries to build the largest circuit he can. More intricate circuits win more points. Opponents try to disrupt incomplete circuits with "shock" or "short" cards. The construction of circuits is totally realistic, so this game is educational as well as a good deal of fun.
Complexity: 4; Degree of Strategy: 3; Skill Level: 2-3; Adequacy of Rules: 4; Originality: 4-5; Presentation: 4; Durability: 5; Replayabillty: 5
Beyond Words around $\$ 3$ from Pantheon Books, 201 E. 50 St., New York, NY 10022.
Unlike most other games, Beyond Words doesn't come in a box, but in a book. The book consists of seven novel word games, each of which is named after a major literary figure, because of an affinity between the game and the author. For example, "Joyce" is named after James Joyce, because, as in his books, "the words go on and on." Each of these games includes some rules followed by a dozen playing sheets on which the game can be played with pens or pencils supplied by the player. I found all of the games of interest, with "Joyce," "Poe," and "Dickens" my favorites. In "Joyce," each player tries to make the longest possible words and get to the finish line first, traveling around a pathway of squares. Meanwhile, his opponent places letters in hurdles which he must use on his way. In "Dickens," players try to form words which go in many directions. (Like the namesake's plots.) "Poe" is a sleuth game in which each player tries to deduce his opponent's secret word. Some of the games are for two players; others for 2-6. If you like a game-book format, there are two earlier volumes in this series you may find of interest as well-Beyond Tic Tac Toe and Beyond Solitaire-also by Sid Sackson.

Complexity: 4; Degree of Strategy: 4-5; Skill Level: 2-3; Adequacy of Rules: 5; Originality: 5; Presentation: 5; Durability: 4; Replayability:



Seven years ago, Ena Fielden was asked to find an original print and the source of this photo of W.C. Fields doing an imitation of Queen Victoria. This is the story of how she tracked a print down and found out the photographer's name and approximate date it was taken.

# Why Was This Picture Taken? 

By Ena Fielden

Picture-sleuth Ena Fielden of Penguin Photo Research recently related to us the following true story that defies a fully satisfying explanation:
In January of 1970, I received a letter of inquiry from a large publishing house. Enclosed was a fuzzy photostat of W.C. Fields in a hilarious gag pose as Queen Victoria. "We have looked just about everywhere to no avail," the letter anxiously concluded, "PLEASE see if you can turn this up for us." In order to reproduce the photograph commercially, my client needed not only a clear print of the original photograph, but also the date of the photo and the name of the photographer. I appreciated the "PLEASE," and besides, this photograph pointedly recalled an incident from the early days of my career as a picture researcher. It was in London, and my boss, the picture editor, was fond of reciting the mildly pompous admonition: "Never give up a search for a photograph, unless it is a request for an authentic picture of the Queen of England standing on her head in the center of Piccadilly Circus." Although the Fields photo seemed a perilously similar task, it also promised to be entertaining. So I agreed to try to track it down.

A routine check at the local library yielded less than expected. Many pertinent books were out in circulation, presumably to W.C. Fields cultists. So I headed for the library at Lincoln Center. A lucky choice, as it turned out, because I
located the photo almost immediately in an issue of Stage Magazine. Stage was a short-lived publication which staggered through a total of four issues before it collapsed in February of 1941. In one issue a full page was devoted to my photo of Fields, captioned "Great Impersonations." This suggested to me the possibility that the photo had been expressly commissioned by Stage. But where was the photo credit? There was none.
I thought it unlikely that any of the magazine's staff would remember the photograph at a distance of 30 years. But on the chance, I jotted down the names of the publisher, managing editor, and art director. Alas, the publisher, Alexander Ince, and editor Alexander King (the famous raconteur and one-time picture editor for Life) were no longer living. But to my delight, the art director still resided in Manhattan. I got her story by phone. She vaguely recalled the picture, but told me that King had the responsibility for selecting all photographs. I asked about the disposal of material published in Stage and learned, not surprisingly, that one way or another it had all gone astray following the magazine's bankruptcy. "One morning," the former ed art director reminisced, "I came to my office and my desk was gone."

Now that I had located the source, my next step was to find out the photographer's name, as my client was eager to avoid any copyright problems.

I got hold of every available clipping on W.C. Fields, some of them so old that they literally powdered in my hands, "snowing" untidily around my seat on the lovely red carpet in the library. I looked at Fields in hundreds of gag poses, still photos, news photos, and publicity portraits. At last I glimpsed him as Queen Victoria. Unfortunately, not the photo I was looking for. I'd found instead a reproduction of the John Decker portrait of Fields that hangs in Hollywood's fabled Chasen's Restaurant.

Decker had painted Fields as Victoria, Harpo Marx as Blue Boy, and I believe, Garbo as the Mona Lisa. Harpo bought the Decker original for his home. But rumor had it that Fields was too thrifty to spend the money for his likeness to British royalty.

Finally the "other" Victoria showed up, and, hallelujah, under the photo was the name of the photographer-Will Connell.

My next step was to check the Los Angeles and Hollywood phone books for his number and address. No luck, so I phoned L.A. information. Was the directory out of date? No, Connell was not listed.
Back to the stacks. This time I uncovered a clipping on Connell. Clearly a success in his day, a 1937 Herald Tribune carried his picture and a full-page layout of his work. From his picture, Connell appeared to be about 30 years old in 1937,
which would make him 65 or so at the time of my investigation. The description of Connell as a "creative photographer of incisive mind and satirical impulse" certainly jived with his Fieldian version of Victoria. Now, if the Trib saw fit to devote a whole page to this man, I figured, perhaps he was known in New York as well. But a call to the Press Photographers Association failed to turn up his name in either current or back membership lists.

Surely the Tribune must have had some kind of file on him, no? But among the many dearly departed I encountered on my capricious trail of research was, of course, the late Herald Tribune. Yet the archives of a once major newspaper could scarcely have gone to the four winds in the manner of Stage's. I contacted the Newspaper Guild and was put through to a former Tribune Editor. He reassured me that the Tribune files were extant, now housed in a special annex at New York University. But he was unable to supply the married name of the woman who supervised the files. He promised to call back with that information in hand. He did indeed call back, and I was thus able to phone the married lady at her special number. Her news was not what I'd hoped for. Only a few outstanding photos were left in the files. She had known almost every photographer who worked for the Tribune and the name Will Connell did not ring any bells. As a favor, I asked her to check anyway. She returned to the phone and, with some surprise, told me that she had located a portrait of Will Connell with an address on the back, but no date. It was an L.A. address, and I jotted it down.

What had happened to the rest of the Tribune files? It seemed that the best of their photographs had been turned over to Life Magazine. "You can call Life," the pleasant married lady proposed, "but I understand they are kept under lock and key somewhere and are hard to get. Good luck!"

Life, however proved unexpectedly helpful. They supplied a 1948 address for Connell, as he had worked for them that year. The address was the same as the one I had unearthed from the Tribune.

I immediately sent off a letter to Will Connell. Black ink marked the enve-lope-"If address changed, please forward." I also airmailed a note to the nearest thing I could find in Hollywood to a Photographers' Guild, asking if they knew the whereabouts of Will Connell. "Answer yesterday," I pleaded, "Thanks for the anticipated co-operation."

If Will Connell were alive and well and living in Los Angeles, what a happy ending this would be for Ena Fielden's Fields Follies. If his letter came back stamped "Deceased," I'd have to trace the rights through his estate.

Field's face grinned devilishly in my thoughts. Somehow this whole story re-
minded me of the myriad of bank accounts Fields opened during his lifetime under various names and in various locations. Finally, not even Fields himself knew what name went with what location.

My mailings brought no positive response. Connell had temporarily disappeared. (Later that year, after I stopped working on the case, I got word from the American Society of Cinematographers that he was dead.)

Although my main line of research was finished, I remained fascinated by the photo. Why was it taken? During a final obsessive search through my memory for some logical link, the image of Diana Barrymore popped into my head.

Fields was a great friend of the late John Barrymore. In 1942 Barrymore's
daughter, Diana, made her motion-picture debut at Universal Studios in a film entitled Between Us Girls. Diana was 21 years old. In one short scene of the movie she appeared as the 80 -year-old Victoria. It was a triumph of makeup art and received a lot of publicity. Fields was also working at Universal. Could he have posed for his version of Queen Victoria to amuse his friend's daughter on the set? Looking through two volumes of stills from Between Us Girls, I found several Fields photos but none were Will Connell's shot.

Maybe it was just a publicity photo. Or, the most likely explanation, though dishwater dull, is that it had been set up and photographed specifically for Stage Magazine after all. But I still wonder. $\qquad$
W.C. Fields was not the only actor ever to impersonate a demure demoiselle. Below are six
other wolves in ewes' clothing. See if you can recognize the stars behind the disguises. And if
you're a real movie buff, name the film in which each actor "skirted" his scene.



1. OPERATION SAIL.

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5. DENMARK "DANMARK" A rare view of the Danish training ship shortened down for a full gale off Cape Horn.
6. ITALY "AMERIGO VESPUCCI" Representing the pride of Italy and the Italian people everywhere.

7. U.S.A.


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4. GERMANY

5. DENMARK

6. ITALY

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|  | 1 | 2 | 3 | 4 | 5 | 6 | PRICE | TOTAL |  |
| Signed \& framed |  |  |  |  |  |  | \$55.00 |  |  |
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... [The] principal characteristic [of chess] seems to be-what human nature mostly delights in-a fight. . . but a fight in which the scientific, the artistic, the purely intellectual element holds undivided sway.

Emanuel Lasker, Ph.D.
World Champion 1894-1921

# Chess Pieces 

by Lloyd Kawamura

Unlike many other popular games, chess does not include the element of luck. When two chess players sit down to "play," they start out with even armiesno one gets dealt a bad hand. There are no hidden cards, no dice, no spinners.

So why, if everything is out in the open, hasn't someone looked at the various possibilities and figured out a winning strategy, a "best move"? The answer is simple. There are well over a quarter of a million possible positions after each player has made only two moves! The possibilities in chess still baffle our computer technology; to this day, any ranked chess master would defeat the best chess-playing computer in the world. And does the chess master look at every possibility? Hardly. That's why masters lose to other masters.

And so, chess has its element of suspense, that quality of excitement that makes the game worth playing. You never know what your game will be like when you start it, or what moves your opponent will make. The result is that every game of chess boils down to a struggle between two players, neither one with all

## For Beginners

Want to improve your game? Here are a few tips that have helped many beginners start their games more effectively.

1. Castle early. Tuck your most critical asset, your king, safely in the corner out of the reach of your opponent's pieces. Once castled, don't move the three pawns in front of your king without a very good reason.
2. In the beginning phase of a game, make only one or two pawn moves. Move pawns if they are helpful towards bringing out your pieces with real fire power, such as your bishops, but don't push pawns impulsively and rely on them to win your wars for you.
3. Bring out all of your pieces to maximize your options; don't move one or two pieces over and over. Whenever possible, bring out a new piece with each move.
the answers, each one dependent only on his skill at the game.

A good example is the Fischer-Spassky world-championship match of 1972. Boris Spassky, the world champion at the time, had an impressive record against the very best players in the world. On the other hand, Bobby Fischer, who was destined to win the championship from Spassky, had earned the highest rating in chess history. For very good reasons, this was called "the chess match of the century." And yet a curious thing happened when they played each other: both players made an uncharacteristically large number of mistakes. For, together, they created so many possibilities on the chessboard that neither player could consistently play the best move. But Fischer played well enough to cause Spassky to slip more often and more seriously, so he won. That kind of confrontation tends to have a familiar ring for people involved in competitive occupations, from professional sports to business to politics. The following pointers may or may not apply to your own life, but they will help you beat another beginning chess player.

## Basic Training

Giveway chess: The object of this exercise is to give away all your pieces, including your king, which is captured like any other piece. Of course, there is no check, and you win when you have no pieces left or cannot move the ones you have (if you have a pawn left, for example, but can neither take a piece with it nor move it to a legitimate square).
Capturing is compulsory, and some people call missing a capture a forfeit of the game. If you have a choice of captures, you may play your choice. Otherwise all the basic rules of chess, including piece promotion, apply as usual.
This basic training exercise may sound as effective as policing the barracks, but it will sharpen your eye for battle because it will train you to recognize capture opportunities.

## CHESS PROBLEMS



White

1. White to play and checkmate in three moves.

2. White to play and checkmate in two moves.


White
3. White to play and checkmate in three moves.

Answer Drawer, page 60

# What Makes Crossword Puzzles Tick? 

by Jack Luzzatto

The crossword-puzzle industry is booming these days. Magazine racks and bookstalls bulge with the latest compilations, and there's scarcely a newspaper that doesn't publish a daily puzzle. An "industry source" estimates the annual earnings of constructors and editors alone at close to half a million dollars. Not surprisingly, crossword puzzles run the gamut from the shoddy to the sublime. What is curious is that many solvers can't tell the good from the bad. So long as a puzzle presents a reasonable challenge and the answers fall into the squares at a lively pace, no one complains. And yet with so much in print, it really pays to be discriminating. There just isn't enough time or energy to do every puzzle you run across, so why not insist on getting the most enjoyment for your effort. Level of difficulty is not the point. A puzzle can be fairly easy and still be a good puzzle. And a sterner test may turn out to be totally devoid of grace and ingenuity. In fact, these hardcore headscratchers are sometimes the worst offenders. So, what are the things to look for before you pick up your pencil and take that leap of faith?

1. Scan the clues. There should be at least a handful of truly intriguing definitions. If so, chances are your wheels will already be turning, and the rest of our guidelines won't matter to you. But wait. Is there a heavy ration of clues like "Persian fairy: Abbr. (variant)" or "Philippine two-toed sloth: feminine plural"? There's more dross than gold in a puzzle like that. A heavy reliance on the arcane is usually an indication of the constructor's limitation and/or laziness.
2. Look at the diagram. Is it full of three- and four-letter words? If so, pass it up. On the other hand, if you see a nice selection of 10 - or 15 -letter words streaking across the page (or, better yet, big words that interlock), odds are you've struck paydirt. Keep an eye out for long words running side by side, a treat for the solver and a sign that someone has taken extra pains to create a superior product.

These two tests should be sufficient for you to make your assessment. (Another point to look for might be the name of a well-established constructor or editor atop the puzzle, but unless you are a real aficionado, most names won't ring any bells.) Quit here and you're already miles ahead of most solvers. But the best cross-
word-puzzle editors look a bit harder before they accept a puzzle. First they make sure that the key words-the essence of the puzzle-are inherently interesting and consistently topical, or that the puzzle is based on a clear idea and is not just a jumble of miscellany. Then they check carefully to see whether the pattern made by the black and white squares is pleasing and symmetrical. It's a fairly strict rule that a diagram must look exactly the same right-side-up and up-side-down. The best constructors see to this as a matter of course, since they know they won't get away with asymmetry. Usually, too, a diagram forms a perfect square, having the same number of spaces across as down. Most often this number is odd-why, I don't know-with a $15 \times 15$ grid being the standard minimum (you can't pack enough goodies into a smaller puzzle), and $25 \times 25$ a maximum (larger puzzles risk boring the solver and are hard for the typesetter to lay out on the page).

Next, an editor counts the black squares to judge how hard the constructor has worked. Since the diagram is designed before the word interlocks are devised, a lot of black means the puzzlemaker is either a hack or on vacation. Pioneer puzzle editors established a rule in the 1920's that stands to this day: no more than one sixth of the squares may be black. A puzzle with much more than that is a sure reject unless it has some special redeeming features. (Other born losers are diagrams that incorporate words of less than three letters or contain areas which are completely marooned in black squares.)
A related concern is the word count. The total number of words in a puzzle, across and down, is an important index to

I once received a crossword puzzle from a convict in the Midwest. He wanted five bucks for it. It was an awfully clever composition and I nearly decided to publish it, but it had a strangely familiar feeling to it. So I did a little checking, and sure enough, the puzzle-word for word-had already been published many years before. In fact, it was one of my own. No wonder that guy was behind bars.
the constructor's skill. The average word count for a $15 x 15$ puzzle is 78 to 84 . The finest job ever done had only 64 words. Experienced editors can see these relationships at a glance and rarely bother to count or calculate.

Now. You be the connoisseur. Take the diagram below. It's from a puzzle that recently appeared in a large national publication. What do you think of it? (Hint: It stinks! How many serious weaknesses can you find in it? See the Answer Drawer, page 60 , for half a dozen.


Of course, every rule has its exceptions. In certain extraordinary interlocks, the constructor's main problem is to consistently come up with good words. My own standard is this: is the word within the ken of an average adult? Is it current and not ridiculously archaic? Is it too technical or specialized? Is it interesting? Sometimes only a weirdo word will get the puzzlesmith out of a trap (usually of his own devising) so that he can finish the blasted thing. In moderation, that can be forgiven, as long as there is a good authority for the far-out word. But, most importantly, this word should be crossed by easier words, to make the puzzle solvable.

That brings me to a pet subject of mine: zombis. You know what a zombi is. Something that isn't buried but should be. I propose that the crossword-puzzle world bury its zombis. They have labored overlong and like all such matter still above-ground, their presence can be only too readily detected with a charnel, not Chanel, scent. I refer, of course, to dead words eking out a posthumous existence in puzzles.
continued page 24
continued from page 23
Way back in the Twenties, the cross-word-then called word cross-offered these words quite innocently, and their novelty kept the public from realizing that the zombi situation was gaining a foothold. Not the entire public. Every now and then some practical critic would write to a puzzle editor or constructor and ask: "When would anyone ever drag that word into a conversation? And where did that word ever appear, except in a crossword puzzle?" Good question. The kind a sensible person asks. It's time to see what can be done to eliminate dead words from puzzles.

This does not refer to trite words. A word like Erie unavoidably turns up in puzzles because it's so useful. I mean really dead words. There may be a few professors around, who, upon finding their mislaid footnotes, shriek "Eureka!" like a Greek. But I'll betcha no professors anywhere will raise their brimming goblets and scream "Rivo!" This is a word lurking in Webster's International No. 2 (and by golly, they saved it from No. 1, but coming to their senses, the dictionary makers dropped it from the current No. 3 ). Add it to the scrapheap, sirs and mesdames. Pronounced reev-oh, and devoid of etymology, it is defined as "an exclamation used in drinking bouts." At your next such bout holler "Rivo!" and see what happens. But don't blame me.

This is not to say that I have never sinned in this direction. You can probably find infrequent puzzles of mine that use words rescued from limbo, but they are few and growing fewer all the time, and at present have reached the vanishing point. It meant work. Like doing the impossible. It takes longer to do it this way. But I'm willing, and the solver benefits.
It is now time to clean the inee off our arrows. If we can't find some real live curare, let's just throw stones. Inee, which is in Webster No. 1 (the unabridged from about 1909 to 1930), never made it to Webster No. 2 (the unabridged from 1930 to about 1960). The etymology is that it's a French transliteration of an African word for an arrow poison made from the apocynaceous plant, Strophanthus hispidus. I guess hispidus means that it's hairy. A better candidate for decent burial could hardly be imagined, but it's still around. Besides, Africa may go nuclear any day now, pygmy archers of the Zaire army notwithstanding.

When was the last time you said hello to a friendly Indian with a greeting like "How, netop!"? Pretty long ago, I daresay. Yet this zombi creeps into puzzles. A Narragansett word meaning friend or kinsman, it's so handy, and it appears in Webster 1, 2 and 3. Maybe it was culled from old New England documents. It seems a likely candidate for oblivion.
Also ready for retirement is the word
esne, the serf who's been around too long, but this is historical and they won't boot it out of the dictionaries. It's just that it's a puzzle cliché. Like ers, the bitter vetch, we'd be better off without it.

Slang words are consigned to the scrapheap with great celerity. Who wears the cat's pajamas today, and who's the bee's knees? Only some forgotten "sheik" of yore. That's what ordinary people do, dump old slang into limbo. But the dictionaries hang on to slang like grim death, so this sentence, which probably made sense in the 19th Century is offered for your amusement. "I can see by your garb that you're so oof $y$ with oof that it wouldn't pain you to slip me some rhino, tad." Howzat again? Well, with them snazzy threads you gotta be loaded. Slip me some bread, kid. Oof is slang for money. Webster 3 says it probably comes from Yiddish; rhino is old British slang; tad old slang for kid. Amusing, but no longer in use. Since what I say doesn't go, tad, you'll probably be seeing these words again and again-in puzzles.
Sweeping out all this dead matter might hamper constructors who have leaned comfortably on such props for years, making some good oof out of the process. But rhino isn't everything. I'm all for quality control of the product. Our language is so rich, alive and growing that use of zombi words is a poor substitute for quality.

# CAN YOU OUTSMART OUR COMPUTER? 

Don't be too sure. The computer built into Parker Brothers' new game Code Name: Sector ${ }^{\text {rM }}$ is capable of making thousands of calculations per second. It's as powerful as early computers that filled entire rooms and sold for millions of dollars. And, while it gives you clues to track down and sink $\alpha$ hidden electronic submarine, it also helps the sub escape and counter-attack. That's the catch that makes every game a real challenge. Whether you're playing alone or against others, your toughest opponent is the computer. Code Name: Sector ${ }^{\text {TM }}$, the new electronic board game from Parker Brothers. It's a gome with a mind of its own.

These 16 pages have all kinds of puzzles, easy and difficult, to help keep your mind from bagging at the knees. Answers on pages 62, 64.

Crossword Puzzle \#1
by J.L.

Marion Lathrop of Middleport, N.Y., grandmother of eight and a retired librarian, attended Skidmore and Wheelock colleges and now solves about 14 crossword puzzles a week. "I thought this one was fairly easy, but $59^{\circ}$ Across was a real stumper.

## Illustrated Crossword

## Armchair Safari



6 Bankrol
9


14 Lawful
15 Indignation
16 Slip, brassiere or pantie

17


19 Endures
20 Military strongholds: Abbr.
21 Urge on
22 Greek peak
24 Obtain
25 Cattle
27 Sign of box-office success
28 Flowers grow


31 Music.system
33 Intense feeling
34 Billiard stick

35 Phlegmatic, apathetic
39 Stationary rowing device, for example
42 Occult
43 Friend
44 Fairy-tale monster
45 Hockey players
47 Districts in London and New York
48 Passport endorsement
51 Loped
52 Price of something
53 - spree
54 Currently fashionable
55 Small French coin
56 San Francisco hill
59 The groaning board
61 Scooter
64 Fencing weapons
65 Historic age
66 - Major, Dog Star constellation
67 Groove


69 Sidles

| 1 | 2 | 3 | 4 | 5 |  | 6 | 7 | 8 |  | 9 | 10 | 11 | 12 | 13 |
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| 67 |  |  |  |  |  | 68 |  |  |  | 69 |  |  |  |  |

DOWN


2 Sword handle
3 Hockey equipment
4 Short drink
5 The Parthenon is here
6 Fly
7 Craftsmanship
8 Intense wish


10 Unnamed person
11 Wise saw
12 Fathered
13 Trials
18 The time of your life

23 Fin on a fish's back
26 Disinclination to move
27 Grow more precipitous
28 Weeps noisily
29 Noah's eldest son
30 Like a polished floor
31 Swine genus
32 And so forth: Abbr.
34 Roman statesman and orator


37 Small case worn on a Japanese girdle

38 Sandra and family
40 Commander-in-chief: Abbr.
41 Serve as crew
46 Maniacs
47 Origin
48 Politician's support
49 Unsuitable
50 Cavalry sword
52 Murmur sweetly
54 Tableland
55 Antlered deer
57 Dust Bowl refugee
58 Shakespeare's queen


62 Mouths, orifices
63 Wicked

WASHINGTON
J. ADAMS

JEFFERSON
MADISON
MONROE
J.Q. ADAMS

JACKSON
VAN BUREN
W. HARRISON

TYLER
POLK
TAYLOR
FILLMORE
PIERCE
BUCHANAN
LINCOLN
A. JOHNSON

GRANT
HAYES

FIND THE PRESIDENTS
Circle the names of all 38 presidents hidden in this maze. They may read forwards, backwards, up, down, across, or diagonally, but always in a straight line. Not all the letters are used. Words often overlap, and letters may be used more than once. There are more puzzles like this one throughout the Pencilwise Section, and the same rules apply.
PERSRELYTYLRPSONDGIO
POLKSYATNDNALEVELCDG
TRUAGEANANIYDENNEKGT
RNW JEFFERSONNOSLIWOR
FORATAFEGEROMLLIFRFE
EMRDSTTLEVESOORFREOT
LCOAEHNCKEMKXOBQAWRR
NAFMAD।SONIC।CHRGOPA
ORISMRLNLYCANATJYHOC
STHARDINGRAJOHNSONBW
NNERUBNAVTFOUNDTMEUL
HOWESTCBAAORXKNLCSRY
OSONMROUPFRNOOCEOIOT
J | HPADLC IOD IXLGVPERM
LRFVDTNYELNIKCMETEFP
SRGTAYLORKNHMSQSVCOL
EAKRQLBUCHANANAOAMST
YHSUJMIDEEGDILOOCSJA
AWFMNOSIRRAHBHBRVKAE
HOENAMURTHMFHKITOAXB

GARFIELD ARTHUR CLEVELAND B. HARRISON MCKINLEY T. ROOSEVELT

TAFT
WILSON
HARDING
COOLIDGE
HOOVER
F. ROOSEVELT TRUMAN EISENHOWER
KENNEDY
L. JOHNSON

NIXON
FORD
CARTER

## GROWING CRAZY

It will take thyme to find the common names of 33 flowers, herbs and plants hidden in all these letters. Whether you are an adult, orchid, or wandering jew you have a brilliant fuchsia as a word finder.

AZALEA<br>BITTERSWEET<br>CACTUS<br>CHRYSANTHEMUM<br>DAFFODILS<br>DILL<br>EVERGREEN<br>FENNEL<br>FERN<br>FUCHSIA<br>GLOXINIA<br>HIBISCUS<br>HOLLY<br>HYACINTH<br>IRIS<br>IVY<br>JASMINE

NGPSHACTNIMRAEPSFNWE NAAGUIEAIGLMZEPWQXVZ P PRBFTDTHXGLAVENDERA GLSCJTCCYZLCLPDURMFY DQLII EBAHMONEHOGBVQH ZRE|KSGSCRXZAPRZGLDZ GAYCTNSVLTIAVERBENAD DFVLEIDUBFNLENNEFAUT IUS I EOJASMINEOAROTHN HCULWPRDATAPQRAO।EI I CHRYSANTHEMUMPSNAPBM RSZMRRZYKSYCAALOMNIR O I LDEPMLOVNNPR IMROSE YAPFTEIRILLEODWARTCP BGMHTTSZLPSSPVXRDRUP ASNOI FW•ANDERINGJEWSE L I,BLBQCDGADNLEFOHIAP CRLLIJQHMIDRUNERHUFG EIHYACINTHAETTOARCN I D AF FOD I LSPZFENBMSOJK

LAVENDER
LILY
MARJORAM
NARCISSUS
ORCHID
PARSLEY
PEPPERMINT
POINSETTIA
PRIMROSE
ROSE
SPEARMINT
TEA
THYME
TULIP
VERBENA
WANDERING JEW

Flights of Fancy

Flying thrills at the tip of your pen

## ACROSS

1 Make into law
6 Speaks one's mind
12 Turkish general
17 Engines
19 Cloudy interstellar mass
20 Triangular plane wings
21 Plane flyer, no hands!
23 Swimming animals
24 Gain altitude
25 Oiled plane struts
26 Fuel indicator
28 Babe's teammate
29 Royal Auto. Club
30 Japanese brew
32 Spread perfume
33 Bitter substance
34 Article in stock
36 Channel to the ocean
40 Aircraft for water
42 Coup ——, military takeovers
44 Raises objections
46 Short takeoff and landing
47 Man's name
49 Pretty sudden

|  | 1 | 2 | 3 | 4 | 5 |  | 边成: | 6 | 7 | 8 | 9 | 10 | 11 |  |  | 12 | 13 | 14 | 15 | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 |  |  |  |  | 18 |  | 19 |  |  |  |  |  |  | 20 |  |  |  |  |  |
| 21 |  |  |  |  |  |  | 22 |  |  |  |  |  |  |  | 23 |  |  |  |  |  |
| 24 |  |  |  |  |  | 25 |  |  |  |  |  | 26 |  | 27 |  |  |  | 28 |  |  |
| 29 |  |  |  | 30 | 31 |  |  |  |  |  | 32 |  |  |  |  |  | 33 |  |  |  |
| 34 |  |  | 35 |  | 36 |  |  | 37 | 38 | 39 |  |  | 40 |  |  | 41 |  |  |  |  |
| 42 |  |  |  | 43 |  |  | 44 |  |  |  |  | 45 |  | 46 |  |  |  |  | - | \%a... |
|  | $\cdots$ | 47 |  |  |  | 48 |  | 49 |  |  |  |  | 50 |  | 51 |  |  | 52 | 53 | 54 |
| 55 | 56 |  |  |  |  |  | 57 |  |  | 58 |  |  |  | 59 |  |  |  | 60 |  |  |
| 61 |  |  |  |  |  |  |  | 3 | 62 |  |  |  |  |  |  | 12 | 63 |  |  |  |
| 64 |  |  |  |  | S | 65 |  | 66 |  |  |  |  |  |  |  | 67 |  |  |  |  |
| 68 |  |  |  |  | 69 |  |  |  |  |  |  | \% | 70 |  | 71 |  |  |  |  |  |
| 72 |  |  | E | 73 |  |  |  |  |  |  |  | 74 |  |  |  |  |  |  |  |  |
| 75 |  |  | 76 |  |  |  | 77 |  |  |  | 78 |  |  | 79 |  |  |  |  |  | Pe |
|  | - | - - \% | 80 |  |  | 81 | 3 | 82 |  |  |  |  | 83 |  | 84 |  |  |  | 85 | 86 |
| 87 | 88 | 89 |  |  |  |  | 90 |  | 91 |  |  |  |  | 92 |  |  | 93 |  |  |  |
| 94 |  |  |  |  | 95 |  |  | 96 |  |  |  |  | 97 |  |  | 98 |  | 99 |  |  |
| 100 |  |  | \% | 101 |  |  |  |  |  | 102 | 103 | 104 |  |  | $\stackrel{3}{2}$ | 105 | 106 |  |  |  |
| 107 |  |  | 108 |  |  |  | 109 |  | 110 |  |  |  |  |  | 111 |  |  |  |  |  |
| 112 |  |  |  |  |  |  | 113 |  |  |  |  |  |  | 114 |  |  |  |  |  |  |
| 115 |  |  |  |  |  |  | 116 |  |  |  |  |  |  |  | 117 |  |  |  |  |  |

51 Flies slowly off-course
55 Where to get bargains
58 First to fly the Channel, 1909
60 Word form for wolf
61 Where office letters are
62 Tanking up
63 Withered

64 Jibe
65 Training "plane" on the ground
67 Recaptured
68 Cats
69 Long Japanese guitar
70 George Sand's married name
72 Animosity

73 Fellow members
74 Fellows in religious life
75 City of north Japan
77 Petroleum goo by-product
79 Delineate or sketch
80 Orchestral harp
82 Too young to fly right
84 Apportions
87 Copter pad
91 Swindling
93 Out of kilter
94 Divorcees
95 Prosody but not
prose
97 Union jack
99 Confessor's tale
100 Apropos
101 Staggering
blunder

102 Soáred
105 Raised
107 Trash
109 Velocity of level plane flights
112 Tire patterns
113 Set afire
114 Small ear
115 Useful plants
116 Frying pan
117 Ralph -

## DOWN

1 Use as a model
2 Advisory for pilot and navigator
3 Splitting headache
4 Hair dressers
5 Musical syllable
6 Never again
7 Pumpkin or squash
8 Flyer of the Nile
9 No or none, in law
10 Fulsome eulogy in Paris
11 Devils incarnate

12 Familiar Saint
13 Flight height: Abbr.
14 Starfight girl
15 Flying-carpet caliph
16 Take up
18 Feed the flames
20 Menu for competitors
21 Harshly bitter
22 Homer hit
27 Puts to work
31 Judicial inquest
32 The wild blue yonder

33 "__ ask is a tall ship," said Masefield
35 If you've got 'em all, don't lose 'em!
37 Aircraft landing apparatus
38 Envoy: Abbr.
39 How to fly in a storm
41 Left of a plane
43 Reliable wind
45 Took turns
48 Bahamas playground 3-element vacuum tube

52 Kept plane just short of stalling
53 Power of yesterday
54 Hot trails
55 Old violins
56 Nobel poet of India
57 Elbows out, hands on hips
59 Trestles before ski takeoffs
62 Main body of a plane
63 Noted Spanish city
66 Copycat
67 Establishment foe

69 Some sweaters
71 The age of unreason
73 Nag
74 Pilot's dusting target
76 Platform
78 Peak to fly higher than
81 Designated space
83 Extend
85 Made an attempt at
86 Business confederacies: Abbr.
87 Let's drink to that

88 Conk out
89 It could be airmail
90 Ground vehicles
92 Poke
96 Takeoff or landing path
98 Above, earlier in the text
101 Dreamboats?
102 An old pirate
103 Cay
104 Row or rank
106 -mell
108 The bill
110 Sex for everybody?
111 Wise wheeze

## Cine-Maze

by Gerard Mosler

A movie title or an essential word in a movie fitle is hidden in the maze of letters here. In fact, there are 26 such titles or parts of titles you can find by consulting the thumbnail clues for better identification. The words read forward, backward, up, down, or diagonaily but they are always in a straight line and never skip letters. We have started you off by circling LADY, the answer to question number 1 , in the diagram. The words overlap and letters may be used more than once. However, not all of the letters will be used.

You're a good movie sleuth if you can identify 16 or more titles correctly.

## CLUES

1. Funny, isn't she?
2. (Over)towering, isn't it?
3. Scenes from a union meeting
4. A great seasoned ace
5. No longer at this address
6. Down under, that's where she is
7. Bruce in one word
8. To the last
9. A moving little thief
10. It's easy to count to five
11. Lett's tempt Mimi!
12. In Paris at last!
13. Two days so lost. . .
14. . . . as if gone in the air
15. Adventure for Davy Jones
16. Forty-two's in season
17. Schizophrenia in California
18. Christ is tops
19. The apes' abode
20. The moon's made of pasteboard
21. Dark, handsome, and walking
22. A porpoiseful day
23. It breaks all hearts
24. A slow bang of the ball
25. 'Silent' colorful monster
26. Stones gathering no moss

DETORELCMC।B
OECGMNFADPRM
LSTNSUECI LAP
PNLAEPREKRTD
HOSTIULDRISA
I I EROLLINGRN
NTCPARAFTDEE
RCETEGEWNNPT
EU I PERCPVIUM
PDPDNEKEEWSE
AENODIESOPRA
PSUMMERYNNEL
 each state on this map so that no two adjacent states are the same color.

With a few low blows, like 19 Across

ACROSS
1 Punitive
6 Time out for kids
12 Out of power
14 Develop over generations
16 Green
semiprecious stone
17


18 Flaky shiny transparent silicates
19 Hit bottom!
21 -Lanka, Ceylon today
22 Sherbets
23 Deny stingily
24 Roster
25 Miss King of China?
26


27 Cinema
28 Small tip in France
31 Poor or worn out remnant
32 Seattle Slew, perhaps
34 Bring into harmony
37 Saws for fancy cutting
41 Sensational
42


43 Sesame
44 Harte of Poker Flat
45 Kinds or varieties
46 Poker starter
47 Girl's name meaning


49 What to pay
50 More foggy
52 Rekindle
54 Reeled
55 Walks through slush
56 Inquisitive ones
57 Lets it stand
DOWN


2 Effeminate
3 Suddenly flaring stars
4 Condition of sale
5 Author Deighton
6 Brings on a new crew
7 Big occasion
8 Stopper
9 Shade tree
10 Tending to persuade
11 Adds to by mixing

12 Theory: if one
falls, all fall
13 Foreordain
15 Revised
20


23 Extraterrestrial region
24 Theater boxes
27 Ship pole
29


## 30 South African

 gold piece31 Worries
33 Great speakers
34 Long-play records
35 Hard yellow vegetables
36 Betrayal of country
38 After dark
39


42 Planks

Can You Put These Doodles Into Words?

First let your imagination go and try solving the DOODLES, but if you get stuck-or even if you don't-turn to the word skeletons beside each DOODLE and try to find the missing parts to complete the words. The missing parts, read across and downward, will give you our interpretation for the DOODLES. by Gerard Mosler


| S _ _ NT |
| :---: |
| SE_ _ RY |
| TR _ _ E |
| M__AL. |
| P _ _ TER |
| MI__AP |
| SN_EE |
| W _ _ TER |
| Rl |
| B__ DY |
| BE _ _ IDE |

## BE A SPORT

Sports figures with names like Korbut, Klammer, Bjorn Borg, llie Nastase and Kyle Rote are almost impossible to spot in this kind of puzzle. That's why we chose them. Hard, isn't it?

DR. RENEE RICHARDS O.J. SIMPSON HANK AARON JIMMY CONNERS BJORN BORG OLGA KORBUT WALT FRAZIER

FRANZ KLAMMER MUHAMMAD ALI KYLE ROTE KEN NORTON CHRIS EVERT MARK SPITZ BOBBY ORR

JOHNNY MILLER ARNOLD PALMER PETE ROSE BRUCE JENNER ILIE NASTASE
VIRGINIA WADE

AEKARELLIMNMCYANBGOEATRTDNGBLQOZZLEAN SARWBMEAPSYNNHOJPGFORLHLTEIZDRRENEEWP HRSIRSBGFAFTEOEAIBYIEAARKNGPUOIAITGNV SPVEARAJDEQUARSNBMSOIWJNDKZSNNCTNQYUB BAITPEVIRGINI AEPEAMYRAZXNVOHAHHENNXYO DLSOVRHNWADEBSPWMYWYEORAARONNDALGNOSR I A JNI JOPNLZQSHEBEISTCAHDTELCXNRTIGFMO NREMLAPDLONRAHPSAMS IEOPNRBDZMADMARKZE PWALTFRAZIERNOQCGRHJGHNNVEOFQQSPITZXL CNINLQZDVEELSBUSETIBOATNWCSAOZVCPTREM EABZPNOONMUHAMMADALIKAUSONMMSGCTSOMIC RFFEOEREMNIVSLEVIPECBONIBRQLVETREXTXR LFLDLVNAHBARYRSEINEYRACIEIS JUDLEMEEHE AGLOOOLTSRENITAASADTEKCTUQSDNNPVINMFS TUBROKOEEMWCXSWXAYLAECOREFAYLN IEESETO SLMZZFCNOTRONNEKSZYRIRIPSSTAHIQSNLFHN AIVNRUNHRSCPAPEQIKREEBOBBYORRHNIOUGER VUASREEFKUHOEDBSEGMLEDTSTIEXOOERKOXSO DRRBJOJNBOPMNCVJEAYIHGOZEBDOCMRHMBITJ FYEIPEAGERLDFCDRCKINETORRZECDQACCGROB

## NOTE-ABLE PEOPLE

The Eagle-eyed will dare Earth, Wind and Fire to rescue the Grateful Dead and 20 more contemporary music makers hidden among these letters. Hint: One group is spelled out diagonally and backwards.

## STEVIE WONDER JONI MITCHELL PETER FRAMPTON FLEETWOOD MAC EARTH, WIND \& FIRE EAGLES BEATLES GRATEFUL DEAD

HOT TUNA LED ZEPPELIN ALLMAN BROS.<br>SANTANA GEORGE BENSON TRAFFIC RUFUS BONNIE RAITT

JAMES TAYLOR ROLLING STONES ELTON JOHN PAUL SIMON LINDA RONSTADT KINKS
CROSBY, STILLS, NASH \& YOUNG

SHRBGDONTQSVDCXGHPLJMKNVWZLCRIHNOSPLE EFLGPKMQOWALLANKUBENSTEINJUNIORQSVXLJ LXLMQRXPAULS IMONGMPZCIFFARTATMGFELTOL GROSEVEVTFKNADILNWFGHCADBZTQXVRTAOHAL ABOTSRENOOZGEORGEYKC।MMIZNODGARBNNLEN ELOTHOTZUBENSONDKAKEBONNIERAITTEDHRQO I KRAPEUIPPERPWETIMUBLINDARONSTADTLAPL EXAMETNBNNOTXTZFQBDTANADSTLICKSHOOPER MURDALAPREHSTEVIEWONDERTONLAEVAHEWWON STFCDXDZOOMERETRAIYLDWOUJTIIZZAERSIEH YDDDUMOLCUDLBLMERNRLOBBOFTNXIKRREDDJY ZEJONIOPPOSTSFUDTDUNMOLLIUGKEPISASLED ABAURTZERAVALAFIHFSCROSBYUSSDNANYNOTZ LEMDNCELVTBENPARECDSTILLSKTDEKFAKMADE LNEQOHVIIUEBATNTAPKNASHEOSOBKQQLESTSP MSSPLECDRESUSSATSHRYOUNGNZNCBUVBZOAUP ATTAYLORDSEVERLNLANTURESUNEXLVDZXQLTE NECEILGSTANZGADEALLASEGNATSURAPRVSTNL BROSHTMORFLIATEDNOMOLOSFOTNEMEJDUJLEI NIEOOUSPQZDLPIKRENSRAEPHPETERFRAMPTON

## To The Boys of Summer

|  | ACROSS | 35 | Ace of the ball | 4 | Payable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Shack |  | club | 5 | Attacked |
| 5 | Time off for | 39 | Hot spots | 6 | Starter in a |
|  | starting pitcher | 40 | Roughage |  | race |
| 11 | Bucolic poem |  | cereals | 7 | Completely |
| 14 | Loss of sense | 41 | Mineral source |  | bananas |
|  | of smell | 42 | Depend | 8 |  |
| 16 | Puts in the relief man | 43 | Flies high Avoid sinki |  | resembling: |
| 18 | Non-star players | 45 | Switch | 9 | Polishing |
| 19 | Pitcher Borbon | 46 | Tinge | 10 | abra |
| 20 | Thing, in law | 47 | Their eggs are | 11 | In |
| 21 | Musical groups, for short | 48 | zeros <br> Have a good <br> hitting season | 12 | natural sound Mexican |
| 22 | Something | 51 | More |  | cowboy dandy |
|  | sweet |  | frightening | 15 | Declare |
| 23 | Ten cents | 52 | Theater craft | 17 | Battle for the |
| 24 | Wrath | 53 | General |  |  |
| 25 | Tied up |  | movements | 22 | The home |
| 26 | Dismal | 54 | Deeply |  | team |
| 27 | Italian |  | impressed | 23 | Clothing |
| 29 | Verbal |  |  | 25 | Second |
|  | contraction, |  | DOWN | 26 | brightest stars <br> Large |
|  | negative |  | Let up or ease |  | bedrooms |
| 30 | People at the |  | off | 28 | Score a run |
|  | ball game |  | Blows a horn | 29 | Dizzy and |
| 32 | Musical | 3 | What the loser |  | Daffy |
|  | syllables |  | laid | 31 | Shortages |



| 32 Pulses strongly | 36 Loomed tall |
| :--- | :--- |
| 33Show an <br> instant replay | 37 Ascender |
| 34 Cure for what |  |
| Season's | ails you |
| midyear | 40 Goofy errors |
| baseball event | $\mathbf{4 3}$ Got a horse |

44 Rough grass
46 Slim
47 Chew on
49 Three, in Italian
50 Actress Hagen

Crossword Puzzle \#5
by J.L.

## Pioneering Spirit

|  | ACROSS | 36 | Quaint corn |  | Explain a text |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Heavy theatre | 37 | Trails of snails |  | Originate |
| 6 | Agents to | 39 | Chop |  | Raise kids |
|  | impress seamen | 41 | Hard feelings | 8 | On |
| 12 | Agent |  | ways |  | land... |
|  | impress Simon | 43 | Nut for soda | 10 | Wagon |
| 13 | Arbiter | 44 | Civil War |  | westward |
| 15 | Maine to |  | remnant | 11 | Cool tombs (or |
|  | Florida | 45 | Pago Pago is |  | sad Rebs in |
| 17 | Isinglasses |  | here |  | disarray!) |
| 18 | Eared seal (or | 47 | Went to court | 12 | Matched |
|  | end of a traffic circle! |  | All a pioneer asks for | 14 | Worlds of innocence |
| 19 | Chem. | 51 | Draftee | 15 | Oil prince |
|  | compound | 52 | Grommet | 16 | Sing Sing |
| 20 | Smoother | 53 | Fries | 21 | Paths of pain |
| 21 | Photocopy | 54 | Dismal |  | and pleasure |
| 22 | OPEC nation |  |  | 22 | Japanese |
| 23 | Race the engine |  | DOWN |  | migrant to U.S. |
| 24 | Second best | 1 | Voyage to | 24 | Stay home for |
| 26 | Family rivals |  | serendipity, |  | company |
| 27 | Ease of strain |  | 1492 | 25 | Bruits abroad |
| 29 | Watering holes | 2 | Double-tanned | 28 | Boat covers |
| 31 | Soak the |  | leather | 30 | New |
|  | customer | 3 | Iowa college |  | Testament |
| 33 | Spanish beef |  | town |  | book |
| 34 | Bumpkins | 4 | Blemish | 32 | Ransacked |



Nonperiodic Tessellation*
Use a sharp pencil to draw a continuous line through all the numbered dots in order from 1 to 636 . When you have finished, refer to page 64 in the Answer Drawer for a reproduction of the original drawing which we adapted to create this puzzle. If necessary, redraw any incorrect lines; then use a soft pencil to fill in every other figure like a checkerboardleaving the eyes white-to fully reveal the fantastic figures hidden in this intricate tessellation.

* A careful juxtaposition of nonrepeating elements into a coherent pattern.
M.C. Escher's Vlakvulling

Courtesy of the Escher Foundation Haags Gemeentemuseum, The Hague.



## Phrase-Maze

## Friends

The name of this puzzle is the subject, as well as the first word, of a hidden quotation. The letters of each word are in the proper order. The first letter of each new word starts in a square next to, or diagonally adjacent to, the last letter of the previous word. The final word will be immediately followed by the name of the author. The author's name has been circled.

The words may be arranged vertically, horizontally, or diagonally, and they may be spelled in any direction.
A word to the wise: You may find more than one quotation. However, only the correct one will lead you to the author.

These spaces show the number of letters in each word of the quotation, plus the author's name.

FR I ENDSWMYOBJCK ERQUERALOHBLONL WH I R J GRYNRROHSI SCNETHEREBBDOON GRHBNUCPY GONKG TPUNDDJOESLTBRS ETNERASVNR AODA NROBEIBIDEPTHAN FOFR $O$ OB/C OSLWSD ESTABOXX I NCETEER O M AMEROTXUSOATE L AMUNTTHIGSENWP GDEKSWHEJRALEWI WETUO JDMGELTSOP I L S K M NPEDD AGOLBS

FRIENDS


The Plumber's Problem

Mr. Fawcet was a jobbing plumber, and he had been told to examine a tank full of flexible vinyl pipes which some apprentices had been joining together for practice. His instructions were to re-* move all unnecessary piping, leaving only the shortest way through for a flow of water. Which pipes did he leave?
Note: This is a "solid" maze, the paths running in three dimensions. They are drawn in perspective, so where you see that one pipe runs behind another you may follow it round. You do not stop, as you do in flat mazes, just because a pencil line on the paper happens to cross your path. A pencil is not much help in solving this kind of maze, but if you must use one, thoroughly examine the tangle of pipes by eye first. Then mark lightly so you can erase false starts.

## Murphy's

## Law

Which is, of course, anything that can go wrong will!

## ACROSS

1 Robert Burns river
6 Aim of the game?
10 Fired summarily
14 Make a sum
19 Gangland's heavy hitters
21 Gulls, terns, jaegers
22 pound, put on weight
23 Offsetting
24 With skeletons uncloseted
26 Designer Cassini
27 Scads
28 Aura of evil
29 Piercing tools
30 Sea transp. officer
31 Town near Miami, partly abbr.
33 Believer in God
35 - polloi
36 Witches for Macbeth
38 Dispenser of funds
40 Easterly point

41 High musical key 43 General hardware 44 Evening parties
46 Picasso
47 Not AWOL
50 Single
51 Relinquisher
53 Blithe spirits
55 See, as a reference
58 Dawn goddess

59 Wanders
61 Headed again
62 Set of chromosomes
63 Lie to the Indians
67 Alto
68 Sing like a bird
69 Errant veep
70 Patriarch in Genesis: Abbr.
71 Smaller
72 Popeyed ones

74 In a sluggish way
76 Wise man
78 Island-dwelling
80 Falcon hunter
81 Doubtful
84 Cause of gray hair?
85 In Coin, but not in Cent
86 Ecology monitoring agcy.

87 Wrong man for basketball center
90 French office worker
92 Hogan
93 Carpet, for a bawling out
94 Prone to go wrong
98 Hibernian Soc.
99 Sky bear
101 Colored
103 - de Pinos

104 Opera bride for whom all went wrong
105 A wrong gee
107 He goes wrong again
109 Anoint
110 Take care of
111 Enmesh craftily
112 Sore throat
113 Norse literature
114 Psi powers
115 In a mean mood

## DOWN

1 Cheap as can be
2 Lincoln wouldn't!
3 Student guessing game
4 First night: Abbr.
5 Pick up fish
6 Hot-air platform
7 Spectroscope prism
8 Herringlike fish
9 School subj.
$10 \mathrm{Et} \ldots$, and others

11 Kubla Khan's urban renewal site
12 Use if things go wrong
13 Get rid of, if things go wrong
14 Turkish bigwig
15 He spent two years before the mast
16 Played high finance rather sharply
17 Not by oneself
18 Gets the shakes

20 Dise as a tryout
25 Like cheese
28 Took wrongfully
31 Sandpipers
32 Gold was wrong for him
34 Triplet
37 Hamburg's river
39 Horn blaster
42 one's wild oats
43 Exceeding
45 Poe's croaker
48 Jockey's outfit
49 Spires
51 Re-viewed
52 Dispossess
54 Arcaro
56 Rat fink
57 Polishing
abrasive
60 Any English
county
62 Fast clip,
64 Ambiences
65 Plaster art
66 Tripe
72 In succession
73 More aggrieved
75 English title
77 Puff of wind

79 Skyes
81 Clouds of stars
82 In working order
83 Make up for wrongdoing
88 Made like a double-crosser
89 Belgian seaport
91 Gossipy
95 Songwriters' group
96 Radar-screen flashes
97 "When I was a -- served a term ..."

100 Not prone to error
102 Earth goddess in Wagner's Ring
104 Mr. Hunter, The Blackboard Jungle
106 Agent
107 Road map abbr.
$108 \ldots$ jam, really troubled

## BEATLEMANIA

BEATLEMANIA: to love a BEATLE, that is, John, Paul, George and/or Ringo. Also, to love their music. Find the Beatles and 30 of their songs in this puzzle.

ABBEY ROAD
BACK IN THE USSR
BLACK BIRD
BOYS
FOOL ON THE HILL
GOLDEN SLUMBER
HARD DAY'S NIGHT.
HELP
HER MAJESTY
HERE COMES THE SUN
HEY JUDE
LADY MADONNA
LITTLE PIGGIES
LOVE ME DO
MAGICAL MYSTERY TOUR
MEAN MR. MUSTARD
METER MAID
MICHELLE
YRREBWARTSCEGMAGICAL
ABFIELDSELQRDGYSLUAP
RNRPNFALDUSROHUSHJIE
WOAKOGTCSMILGPDFTEGD
ORCZATOEKBDBOMCDOEAU
OWCKI Y I TUEBTZACRULRJ
DEOLYGTTVNRCLADYARLDY
K GOWGXNYLOVEDOATXEES
CINIHEARTSMBANDSDHNW
AAPTYLENOLYAENRURCOR
BNMLEGGFCUVONAEMQ।HP
RWRITERJLGYNBRTAXMAN
EDIAMOETUEROADSLSTRI
PEPPERSUBMARINEVEWDG
AKLETGQBLWOLLEYKCABH
PSENEEAOMANNOWOMYNIT
JOHNRUOYSEVOLEHSEHTM
LUAYMFONTHEHILLERSSU
NLHERECOMESTHESUNLKP
REBBURHLKRMAJESTYEJZ

NORWEGIAN WOOD OCTOPUS' GARDEN PAPERBACK WRITER PENNY LANE
ROCKY RACCOON
RUBBER SOUL
SERGEANT PEPPER'S
LONELY HEARTS CLUB BAND
SHE LOVES YOU
STRAWBERRY FIELDS
TAXMAN
YELLOW SUBMARINE YESTERDAY
GEORGE
JOHN
PAUL
RINGO

## THE FONZ AND FRIENDS

Who can forget the poignant wind-up to "Happy Days'? The Fonz, night school valedictorian! Find Henry Winkler (a.k.a. you know who!) and 29 more actors and actresses who enjoy prime time celebrity. To give you a hand, their T.V. aliases are also provided. (Note: There are two couples who share the same last name.)

MGNALADLAEJROSLYNNEP FARAHLOU I SEMLLAHSRAM EBRTLSISISSHAZAMGURY TELYUPCKSCMICHAELAYS ACHLMBAAQUASXDXDAVID CHAESELKUDI RRXDESOUL MOOREVANNILOTOOEEPED HOW ARDAYOTLMKEBFRSKV AN I OWOLYDNICATREPRAH SONNYCLEMOWXENSBRLLA A BEXYOTLISALAVASETBR D WOYRNEHKALBYDTRAN I A ODAKENRFOYUGLMIOSC.AT GODLLONYHEPRUENJHPTL I NONKREHCABBXNEAREHO VNSANEDLHFREDERMCTOV E Y M M I JROAPERRDOWTEMA DIOZWAKPSABRAFALKRAR BENEFCYVEHCYOFOPUDST SWDEIRAMSGILDRADNHOJ

ALAN ALDA (HAWKEYE) FRED BERRY (RERUN)
ROBERT BLAKE (BARETTA)
SONNY BONO (CHER'S EX)
LYNDA CARTER (WONDER WOMAN)
CHEVY CHASE ("SAT. NIGHT" KLUTZ)
CHER (CHASTITY'S MOM)
PETER FALK (COLUMBO)
REDD FOXX (SANFORD SR.)
PAUL MICHAEL GLASER (STARSKY)
VALERIE HARPER (RHODA)
RON HOWARD ("HAPPY DAYS" RICHIE)
GABE KAPLAN (MR. KOTTER)
LOUISE LASSER (MARY HARTMAN)
FARRAH FAWCETT MAJORS (CHARLIE'S ANGEL)
LEE MAJORS (COL. STEVE AUSTIN)
PENNY MARSHALL (LAVERNE)
MARY TYLER MOORE (MTM)
CARROLL O'CONNOR (ARCHIE BUNKER)
DONNY OSMOND (DONNY \& MARIE)
MARIE OSMOND (SEE ABOVE)
TELLY SAVALAS (KOJAK)
SHAZAM/ISIS (SHAZAM \& ISIS)
DAVID SOUL (HUTCH)
RICHARD THOMAS (JOHN-BOY WALTON)
JOHN TRAVOLTA (BARBARINO)
ABE VIGODA (FISH)
JIMMY WALKER (J.J.)
CINDY WILLIAMS (SHIRLEY)
HENRY WINKLER (THE FONZ) lady at top right who languishes in hot oil. Alas, 30 hammerwielding bandits also await. Our hero can at best sustain two encounters with these thugs. Can you suggest his route?


## Rosamund's Bower

Rosamund was a mistress of Henry II, and legend has it that he built a maze adjacent to his palace in which to keep her safe from the Queen's jealousy. Put on your crown and, pretending to be Henry II, pay Rosamund a visit. Or, diabolically, pretend to be the Queen.


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STOP!
Fold this page in half with this side under. It will hide the easy set of clues for the blockbuster crossword puzzle on the next two pages. Try the hard clues first. To peek or not to peek is up to you.

## Lots of Luck!

## Hard Clues

ACROSS
1 Shave on the road
6 Fast ball carrier
12 Emergency paper money
17 A foolish fancy
22 Tale of Troy
23 Wrap up
24 Eat away
25 Run for love
26 Las Vegas business
28 Money limit in poker
30 W. Point
31 Meager givers
32 Baby talk
34 Girls in '"Tom" shows
35 Women's Lib political goal
36 And not
37 Great Pacific battle, 1942
39 Frosted
41 Student of parent psychology
42 Hoof it
44 Pickpocket
45 - nothing, go all out
47 Lawman at the OK Corral
49 Green island
51 Comes together at a point
54 Castle ditch
57 Soft powders
60 Weirdo
63 Empty
64 High IQ group
65 Figure in a red suit
66 Ground cereal for cattle feed
68 Be -well as president!
70 When older you'll get over it!
72 Second person

73 Kreuger, the Match King
74 Danish weights
76 Quick drink
77 Firemen
79 Tied around the middle
80 Private affairs
82 Lassos
84 Supplies
85 Great auto race
86 Macbeth wanted to be thane of it
88 Lowest point
89 Mulligan
90 Initials on bounced checks
91 The spotted cubes
94 - double take
97 Virile
98 -winner, boot one home
99 Recounted
100 All the boys
101 Where most card games are played
104 Like a boiling kettle
105 Starchy pudding
106 Sticks around poolhalls
107 A nice walk
109 Rounded
112 Quite a rep
114 French cleric
115 Invisible medium
116 Moroccan seaport
117 Greyhound
119 Strongarm debt collectors?
121 Inlay
123 Sired in Numbers
125 Overjoy
127 Bored people at a lecture

128 Pass rope through a block
129 Irrational number
130 Here
132 Tournament rank
133 Instrumental striking: Abbr.
135 Relaxed
137 Lump or shapeless mass
139 Animal fat
142 Eye intently
144 Magicians
147 Political hopefuls
151 Beautiful simplicity
152 Besmirch
153 Gendarme
154 Spy's first name
156 Growing more grapes
157 Muse of history
158 Casino winner's collection
161 Revolutionary gaming device
164 Left the arms of Morpheus
165 Silent screen star Adorée
166 Eucalyptus of Australia
167 Indelicate
168 Civil wrongs
169 News for noses
170 Guides
171 Innocent orphan

## DOWN

1 Guiding light
2 Honest deck
3 Wind instrument
4 Done wrongly: Pre.
5 Dead as -
6 Get back
7 Single-handed

## Lots of Luck!

## Easy Clues

## ACROSS

1 Where Rangoon is
6 One in a hurry
12 Not real paper money (or shorten the script!)
17 Steam
22 Vergil's epic of Troy
23 Enclose in a box
24 Wear by friction
25 Run away to marry
26 Craps, cards, Iotteries
28 Limit set in poker
30 Academy: Abbr.
31 Givers of small portions
32 Have trouble saying S
34 Mrs. Peron and others (or save backward girls!)
35 Epoch

36 Used with neither
37 Water between Australia and the Solomons
39 Sweetened the coffee
41 Nasty little kid
42 Knobby foot bone
44 Immerse
45 Drop in and stay awhile: 2 wds.
47 Wyatt, gunslinger lawman
49 Irish republic
51 Keeps a date somewhere: 2 wds.
54 Water around a castle
57 Baby powders
60 Eccentric fellow
63 Empty of liquid
64 Mental marvel organization
65 Courage

66 Chinese peasant dinner
68 As __rain, quite correct
70 Trifling amount of beans
72 Thee, today
73 Financier Kreuger (or end of a backward ravioli!)
74 Danish weights (or middle of desert!)
76 Expel breath loudly
77 Late-inning pitchers
79 Encircled (or coming back very neat!)
80 Women's secrets
82 Cowboy ropes
84 Shops
85 Indianapolis race, for short

86 Castle Macbeth wanted
88 Lowest point
89 Meat and vegetable dish
90 Initials as no good
91 Slang for dice
94 Dead on arrival: Abbr.
97 Masculine
98
cock-horse to Banbury Cross
99 Repeated the tale
100 Boys in the family
101 In one's domicile
104 Puff like engine
105 Starch palm (just in from Saigon!)
106 Actors' signals
107 Place to take a walk
109 Round as a sphere
112 Identify

114 French churchman
115 Put outside to freshen
116 Word element for salt
117 Motorcoach company
119 Strong apes
121 Map enlargement
123 Fathered: Biblical
125 Make happy
127 They're starting to drowse
128 Female ruff
129 Ab - is ridiculous!
130 Gift
132 Plant starter
133 Westmore of Hollywood
135 Comfortably relaxed
137 U.S. sailor
139 Animal fat (or a possible spade!)
142 Look over quickly

144 Astounders
147 Candidates named
151 Great painting
152 -and feather
153 French cop
154 _- Hari, spy
156 More like grape plants
157 Muse of history (or uncoil the coil!)
158 Big poker winnings in a heap
161 Favorite casino spinner
164 Ascended
165 Dr. Richards, tennis player
166 Eucalyptus of Australia
167 Vulgar
168 Civil wrongs (or ends retorts in courts!)
169 Scents
170 Range cattle
171 Turn sharply
$\quad$ DOWN
1 Lighthouse
light
2 Clean new
deck
3 Stemmy grass
4 Wrongly: Pre.
5 Dead as
really extinct!
6 Regain as
one's own
7 Without aid
8 Healed
wounds
9 Old merchant
guild (now
almost ashen!)
10 Escudo: Abbr.
11 Fishing spool
12 Assembles: 2
wds.
13 Dice play
14 Hold up
someone
15 A do-nothing
16 Annoy greatly
17 Old soldiers
18 In the style of
19 Deadpan
cardgame
member

20 Musical drama
21 Held a new session
22 Capital of Guam (good for an Aga!)
27 Ex-president
29 The cruel Count
33 Gets to a base, in baseball: 2 wds.
37 Indonesian island w. of New Guinea (or broken ceramics!)
38 Appoint to a duty
40 To weigh —, be heavy
41 Scottish hillside
43 Famous statue
46 Poor bluffer and low-stakes player
48 Sports participants

50 Robert Southern general
52 Make a mistake
53 Siamese natives
55 Dead fires
56 End of a cat
58 Ten million rupees
59 Faro dealt by hand
60 Start or beginning
61 Scuba fun
62 French explorer of the Mississippi
64 Bullfighter
67 Lawful
69 Group of three
71 Wrote down the names
75 Feeling of being sorry
77 Bay at Perth Amboy
78 Take an oath

81 Drink something slowly: 2 wds.
83 Clocks for speed
86 Lead ore
87 Relief pitcher must get the
Wise 2 wds.
89 Wise man
91 Gambler
92 Comes closer
93 Not a joke!
94 Crooked cardplayers
95 A few notes of music: 2 wds.
96 Appraise for taxing
97 Mother
100 Burned by hot liquid
101 Two of a kind: 2 wds.
102 Threefold
103 OTB office: 2 wds.
104 Good-bye, cherie

108 White linen vestments (not worn in labs!)
110 Actress Heckart
111 Important genetic acids (or upside-down sand!)
113 Cupid
117 Surly mood: 2 wds.
118 Summer: Fr.
120 Thoughts or plans
122 Smooth or regular
124 Austrian city (where sheep almost graze!)
126 Train driver
130 Over and done with
131 Theatrical tonights
134 Young of cattle
136 Rubs out
138 Red vegetable

140 Man of the cloth
141 Pilfered
142 Irish saint, familiarly
143 Capital of Egypt
145 --wave oven
146 Felt pain
148 Small egg lost in the Louvre
149 Cecil B. De
150 Build
153 Enemies
155 Embracers
157 Gypsy girl (or endless chain!)
159 Superlative suffix
160 Daughter of Cadmus
162 Horse grain
163 Cry of astonished delight

| = | 1 | 2 | 3 | 4 | 5 |  | 6 | 7 | 8 | 9 | 10 | 11 |  | 12 | 13 | 14 | 15 | 16 |  | 17 | 18 | 19 | 20 | 21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 |  |  |  |  |  |  | 23 |  |  |  |  |  |  | 24 |  |  |  |  |  | 25 |  |  |  |  |
| 26 |  |  |  |  |  | 27 |  |  |  |  |  |  |  | 28 |  |  |  |  | 29 |  |  |  |  |  |
| 30 |  |  |  | 8 | 31 |  |  |  |  |  |  | 32 | 33 |  |  |  | 34 |  |  |  |  | 35 |  |  |
| 36 |  |  | \% | 37 |  |  |  |  |  |  | 38 | $\alpha$ | 39 |  |  | 40 |  |  |  |  | 41 |  |  |  |
| 42 |  |  | 43 |  |  | 44 |  |  |  | \% | 45 | 46 |  |  |  |  |  | Ms... | 47 | 48 |  |  |  | 4.... |
| -10\% | 40 | 49 |  |  | 50 |  | 51 |  | 52 | 53 |  |  |  |  | 54 |  | 55 | 56 |  | 57 |  |  | 58 | 59 |
| 60 | 61 |  |  |  |  | 62 |  | 63 |  |  |  |  |  | 64 |  |  |  |  |  | 65 |  |  |  |  |
| 66 |  |  |  |  |  |  | 67 |  | 68 |  | , |  | 69 |  |  | = | 70 |  | 71 |  |  | 72 |  |  |
| 73 |  |  |  |  | 74 |  |  | 75 |  | 76 |  |  |  |  |  | 77 |  |  |  |  | 78 |  |  |  |
| 79 |  |  |  |  |  | 80 |  |  | 81 |  |  | 82 |  |  | 83 |  |  |  | 84 |  |  |  |  |  |
| 85 |  |  |  |  | 86 |  |  |  |  | 87 |  | 88 |  |  |  |  |  | 89 |  |  |  |  | 4-2mis | $\therefore \therefore$ |
| 90 |  |  |  | 91 |  |  |  |  |  |  | 92 |  |  |  |  |  | 93 |  |  |  |  | 94 | 95 | 96 |
|  |  | - | 97 |  |  |  |  | 98 |  |  |  |  |  | 99 |  |  |  |  |  |  | 100 |  |  |  |
| 101 | 102 | 103 |  |  |  |  | 104 |  |  |  |  |  |  |  | 105 |  |  |  |  |  | 106 |  |  |  |
| 107 |  |  |  |  |  | 108 |  |  |  | 109 |  |  | 110 | 111 |  | 112 |  |  | 113 |  | 114 |  |  |  |
| 115 |  |  |  | 116 |  |  |  | Cin | 117 |  |  |  |  |  | 118 |  | 119 |  |  | 120 |  |  |  |  |
| 121 |  |  | 122 |  |  | 123 |  | 124 |  |  | "n | 125 | - |  |  | 126 |  | 127 |  |  |  |  |  |  |
| 128 |  |  |  |  |  | 129 | , |  |  | * | 130 |  |  |  |  |  | 131 |  | 132 |  |  |  | 3 | $\cdots$ |
|  |  | 133 |  |  | 134 |  |  | 135 |  | 136 |  |  |  | \% | 24* | 137 |  | 138 |  | 139 |  |  | 140 | 141 |
| 142 | 143 |  |  |  | 144 | 145 | 146 |  |  |  |  |  | 147 | 148 | 149 |  |  |  | 150 |  | ${ }^{6}$ | 151 |  |  |
| 152 |  |  | 4 | 153 |  |  |  |  | 154 |  |  | 155 |  | 156 |  |  |  |  |  |  | 157 |  |  |  |
| 158 |  |  | 159 |  |  |  |  | 160 |  |  |  | 161 | 162 |  |  |  |  |  |  | 163 |  |  |  |  |
| 164 |  |  |  |  |  | 165 |  |  |  |  |  | 166 |  |  |  |  |  |  | 167 |  | * | , |  |  |
| 168 |  |  |  |  |  | 169 |  |  |  |  |  | 170 |  |  |  |  |  |  | 171 |  |  |  |  |  |

## Hard Clues (con't.)

| 8 | Brands of battle |  | Guam capital |
| :---: | :---: | :---: | :---: |
| 9 | Old |  | in a |
|  | merchants' | 29 | Vic and |
|  | guild |  | old radio team |
| 10 | Getaway: | 33 | Occupies a |
|  | Abbr. |  | base |
| 11 | Stagger from | 37 | Island near |
|  | the bar |  | New Guinea |
| 12 | Frames a | 38 | Allot |
|  | sucker | 40 | Like -_ of |
| 13 | Fun for cube |  | bricks |
|  | rooters | 41 | Scottish |
| 14 | Take by force |  | hillside |
| 15 | Fainéant | 43 | It shouldn't be |
| 16 | Vex mightily |  | license |
| 17 | Treats the beasts | 46 | Cheap sports at the casino |
| 18 | Imitating | 48 | Jocks |
| 19 | Sometimes a | 50 | 'Waitin' |
|  | straight-man |  | the Robert |
| 20 | Groucho's |  |  |
|  | night out | 52 | Misfigure |
|  | Reconvened | 53 | Siamese |

22 Guam capital
27 Cross the creek in a Model T
29 Vic and -.
33 Occupies a base
37 Island near New Guinea
38 Allot bricks
41 Scottish hillside
43 It shouldn't be license Cheap spot
the casino 48 Jocks
50 '"Waitin' for the Robert

52 Misfigure
53 Siamese

55 Exhausted fuel
56 Shadow
58 Ten million rupees
59 Hand-dealt faro game
60 Source
61 Going below
62 French explorer
64 His game is life and death
67 Allowable
69 Trinity
71 Catalogued
75 Twinge of conscience
77 New Jersey river or bay
78 Solemn word
81 How to savor wine
83 X

86 Lead ore
87 Pitchers try to get this
89 Much-married man
91 He plays anything
92 Approaches
93 Freedom to filibuster
94 Crooked card sharps
95 Small amount of music
96 Evaluate
97 Mater
100 Really steamed!
101 Nice poker draw
102 Triple
103 Bookie's setup
104 A fond farewell

108 White vestments 110 Met singer Farrell 111 Genetic nucleic acids
113 Piccadilly Circus statue
117 Sign of a sore loser
118 Summer in Paris
120 Brain products
122 Losers try to get this
124 Austrian Alpine city
126 Manipulate
130 All our yesterdays
131 Guncotton explosives
134 Not a lot of bull

136 Blanks
138 Sugar source
140 Father, but not Dad!
141 Filched
142 Noted saint for - March

143 City on the Nile
145 Tiny
146 Felt tender
148 Small egg
149 Thousand
150 Upright
153 Hostiles
155 A last resort
157 Gypsy girl
159 Superlative ending
160 She saved Ulysses from drowning
162 Grain of grain
163 Smash hit

## Crypto-Search <br> Word Wits

Here's a puzzle that presents a three-stage challenge. First, you break the crypto-code. This is a number-letter code. Cryptogram experts will know to look for those numbers which appear most often, as they probably correspond to the most frequently used letters in the alphabet: e.g., E, S, A, R, and T. The second stage of this puzzle is to rescramble your numbercoded answers to form a second set of words, clues to which appear at the right. Then fill in the grid with the appropriate code letters, and you've created a Find-a-Word. The words to be found are those you've unscrambled from your cryptowords. Enjoy the hunt!

## Instructions:

1. Break the crypto-code.
2. Transpose each letter to its proper space above the numbered dashes.
3. Rescramble the uncoded words and phrases (there's a hint right there, they're not all single words) to create a second set of words.
4. Fill in these new words in the unnumbered spaces provided below the numbered ones.
5. Fill in each grid space with its number-coded letter.
6. Find and circle your unnumbered set of words within the grid.

A.

| $\overline{19}$ | $\overline{20}$ | $\overline{18}$ | $\overline{5}$ | $\overline{1}$ | $\overline{13}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| - | - | - | - | - | $\cdots$ |  |
|  | Degree |  |  |  |  |  |

B.
$\begin{array}{llllll}20 & \overline{18} & \overline{1} & \overline{3} & \overline{5} & \overline{4}\end{array}$

-     -         - _ - - Arrange for publisher
C.
$\begin{array}{lllllllll}18 & \overline{5} & \overline{6} & \overline{5} & \overline{1} & \overline{20} & \overline{8} & \overline{5} & \overline{18}\end{array}$
-     -         - _ _ - _ - _ From now on
D.

| $\overline{6}$ | $\overline{9}$ | $\overline{12}$ | $\overline{20}$ | $\overline{5}$ | $\overline{18}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | - | - | - | - | - |  |
| Dally |  |  |  |  |  |  |

E.

F.

| $\overline{23}$ | $\overline{5}$ | $\overline{20}$ | $\overline{8}$ | $\overline{5}$ | $\overline{18}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | - | - | - | $—$ | Entwine |

G.
$\begin{array}{lllllll}19 & 16 & \overline{1} & \overline{18} & \overline{5} & \overline{4} \\ - & - & - & - & - & - & \text { Extend }\end{array}$
H.
$\overline{19} \overline{5} \overline{3} \overline{218} \overline{5}$
— - - - - _ Free
I.
$\overline{19} \quad \overline{7} \quad \overline{15} \quad \overline{21} \quad \overline{18} \quad \overline{5} \quad \overline{4}$

-     -         -             -                 -                     - Ran
J.

K.
$\begin{array}{llllllllll}\overline{18} & \overline{5} & \overline{20} & \overline{18} & 7 & \overline{9} & \overline{14} & \overline{20} & \overline{5} & \overline{5}\end{array} \overline{14}$
L.
$\overline{20} \quad \overline{8} \quad \overline{18} \quad \overline{5} \quad \overline{1} \quad \overline{4}$
-     -         -             -                 - Lack
M.
$\bar{\top} \overline{12} \quad \overline{20} \quad \overline{9} \quad \overline{20} \quad \overline{21} \quad \overline{4} \quad \overline{5}$
-     -         -             -                 -                     - Freedom
N.
$\overline{18} \quad \overline{9} \cdot \overline{19} \quad \overline{3} \quad \overline{12}$
_ - - - _ East Indian conscript?

0. 

$\overline{20} \quad \overline{8} \quad \overline{5} \quad \overline{13} \quad \overline{1} \quad \overline{14}$

-     -         - _ - -

Nation's song
P.
$\overline{19} \quad \overline{9} \quad \overline{19} \quad \overline{20} \quad \overline{5} \quad \overline{18} \quad \overline{5} \quad \overline{4}$

-     -         -             -                 -                     -                         - Withstood
Q.
$\overline{20} \quad \overline{18} \quad \overline{1} \quad \overline{9} \quad \overline{14} \quad \overline{19} \quad \overline{16}$
R.
$\begin{array}{llllll}\overline{14} & \overline{15} & \overline{2} & \overline{15} & \overline{18} & \overline{5} \\ - & - & - & \cdots & & \text { Titania's husband }\end{array}$
S.
$\overline{19} \quad \overline{20} \quad \overline{7} \quad \overline{20} \quad \overline{5} \quad \overline{4} \quad \overline{9} \quad \overline{13} \quad \overline{19}$
T.

| $\overline{13}$ | $\overline{5}$ | $\overline{1}$ | $\overline{12}$ | $\overline{9}$ | $\overline{14}$ | $\overline{20}$ | $\overline{18}$ | $\overline{1}$ | $\overline{25}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| - | - | - | - | - | - | - | - |  | - |
| Canal |  |  |  |  |  |  |  |  |  |

U.
$\begin{array}{llllll}\overline{16} & \overline{15} & \overline{18} & \overline{20} & \overline{5} & \overline{18}\end{array}$

-     -         -             -                 -                     - Account
V.
$\begin{array}{llllllllll}\overline{14} & \overline{15} & \overline{20} & \overline{8} & \overline{15} & \overline{20} & \overline{20} & \overline{5} & \overline{19} & \overline{20}\end{array}$ _ - - _ - - _ - _ _ Some South
W.

X.
$\begin{array}{lllllll}\overline{5} & \overline{4} & \overline{9} & \overline{20} & \overline{15} & \overline{18} & \overline{19}\end{array}$
-     - _ - - - Fabled
$\begin{array}{lllllllllll}Y . & \overline{18} & \overline{5} & \overline{4} & \overline{18} & \overline{9} & \overline{14} & \overline{7} & \overline{5} & \overline{18}\end{array}$
-     -         -             -                 -                     - _ _ Gunsmith
$\begin{array}{llllllllll}\text { Z. } & \overline{23} & \overline{15} & \overline{18} & \overline{20} & \overline{8} & \overline{4} & \overline{1} & \overline{18} & \overline{14}\end{array}$ from S. Pole


## Facts of Science

## I．

Why are the ridges in bark vertical？A） Because the lines follow the upward direction of the tree＇s growth．B）Be－ cause the pressure of root growth stri－ ates the bark．C）Because the bark is split by circumferential growth（in－ crease in diameter of trunk and limbs）．D）Because the vertical ridging affords greater absorption of moisture seeping down the length of the trunk and limbs．

## II．

TRUE or FALSE：Moose that initially stand their ground when challenged are less likely to fall prey to wolves than those that flee．
sןeulue
 əuOU＇Səaןom kq payวeoidde uəum әa！t hou p！p oum asoom b己 əut 10 ＇Kpnis p｜o！！ןuaวə」 e ul ןeu！ue ve yons 6u！
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## Othello

## The next jump for checkers players．

Othello is the new board game that＇s as simple as checkers， as challenging as chess and as exciting as backgammon．

Othello takes only a minute to learn，but a lifetime to master．Discs are black on one side，white on the other． The strategy is to surround your opponent＇s discs and flip them over to your color．

At quality toy and game departments everywhere．Othello．


Othello．The game of games．
Gabriel ${ }^{\oplus}$
O1977 GABRIEL INDUSTRIES，INC． 41 Madison Avenue，New York，NY 10010

## Cointest

Rules of Play：Each player starts with a stake of four real coins－a penny，a nickel，a dime，and a quarter．Flip a coin to see who goes first；then al－ ternate positioning your real stake coins in any order in any open space．When a coin you play on your turn completely fills a row，vertically，horizon－ tally or diagonally，you score the total value of all the coins in any rows that pass through that coin．You can score on di－ agonal rows of three，four or five coins as long as they reach from one side of the grid to any other side．Keep playing alternately and adding to your scores until both players＇stake coins have been played and the grid is filled．The highest score wins．One four－coin di－ agonal row of printed coins is already filled．See it？It is worth \＄．32．But nobody can count that one in his score．If you want to，you can award that free to the loser of the last game as a handicap when you play again．

If a player does not notice a row he is entitled to and fails to include its value in his score before the other player takes his turn，then the second play－ er can add that amount to his score for that turn．




## ALL THE NEWS THAT'S FIT TO FASHION

Samantha Schwartz had a big problem. Her boss at MGM told her, "Listen, kid, we've got some big T.V. movie contracts comin' up and we need a lot of those American costumes over there in Building 8, on that old Italian Palazzo set. The old bird who keeps an eye on \#8 has got a list of the dates, but can't match 'em up with the costumes anymore. So get right over there and figure out which costumes came when. If you get 'em all right, we'll give you a raise and throw in an autographed photo of Edith Head.'
The old costume custodian, a history nut, in an effort to help Samantha out, reeled off newsmaking headlines for every year listed.
At the left is a photo of Samantha's dilemma. Below are the facts she had to work with.

Answer Drawer, page 60
1820 -Missouri reinforces its pro-slavery position with the passage of the "Missouri Compromise."
1845-Texas joins the U.S. in fulfilling its "Manifest Destiny." Jackson buried at the "Hermitage."
1855-Kansas invaded by pro-slavery "Border Ruffians." Longfellow pens Hiawatha.
1860 -Darwin's Origin of the Species hits America. South Carolina secedes.
1880 -Edison perfects the electric light, and the Divine Sarah makes her U.S. debut in La Dame Aux Camélias.
1887-Edmunds-Tucker law curbs power of Utah Mormons. President Cleveland demands return of war booty seized by Union Armythe swag, captured Confederate flags, goes home.
1903-Women fight for higher pay at work; form Women's Trade Union League.
1915-Alexander Graham Bell calls crosscontinent to his assistant. "Mr. Watson, come here, I want you."
1920-The nation goes dry, and F. Scott Fitzgerald captures the post-war malaise in This Side of Paradise.
1922-"Teapot Dome" explodes and King Tut is unearthed.
1925-Scopes trial queries Darwin. "Gentleman Jim" Walker triumphs in the New York City mayoral election.
1932-The nation is still singing Brother, Can You Spare a Dime. The Lindbergh kidnapping hits the front page.
合 1947 - The "cold war" rages. A million names crowd HUAC files. Marshall outlines his Plan.
1957-Fashion takes a bag with "The Sack." 1,000 Army paratroopers march to the aid of 9 black students in Little Rock.
1965-Malcolm X murdered. Watts boils. First bombing in Vietnam.
1967-Jimmy Hoffa and the "Boston Strangler" go behind bars. Thousands of "Flower Children" converge on Haight-Ashbury.
1976-A Georgia peanut farmer becomes Chief Executive. Burton and Taylor split up, again.
1977-_-"Big Daddy" Amin fails to crash Queen Elizabeth's Silver Jubilee.

The only equipment you'll need is a sense of humor, a spirit of cooperation, and a crowd.

## The Play's The Thing

A lot of people are discovering that competition isn't the only way to have fun at play. Here are two fresh-air games designed for spontaneous fun.

## Knots

Knots is a game that gets people together by getting them apart. About a dozen players can tie on a good one.

To form the knot, stand in a circle, shoulder-to-shoulder, and place your hands in the center. Now everybody grab a couple of hands. If you ever want to get out of this, make sure that no one holds both hands with the same person or holds the hand of a person right next to him. It might take a bit of switching around to get the knot tied right. (If you have too much trouble getting this part together, you might want to quit before you try getting it apart!)

Now comes the true test. You'll probably notice that there are two basic ap-

proaches to untangling the knot. The Activists dive right into the problem-under, over, and through their team-mates-hoping they'll hit upon the solution. Instead, they might well hit upon one of the Analysts, firmly rooted, hands locked in a dignified tableau, carefully surveying the situation before instructing each player precisely where to move and in what order.


## Stand Up

This cooperative game is one of our favorites for getting a group together. You can start with just one friend and end up with a whole crowd of struggling, stumbling, giggling humanity.

Sit on the ground, back-to-back with your partner, knees bent and elbows linked. Now simply stand up together. With a bit of cooperation and a little practice, this shouldn't be too hard.

By the time you've got this mastered, you'll probably have drawn an interested spectator. Have her join you on the

Since you're all in the same tangle together, you'll have to come to some agreement as to which approach to follow. (Note: pivoting on your handholds without actually breaking your grip will add a lot of grace and eliminate the need for a chiropractor.) When at last the knot is unraveled (hurrah!) you will find yourselves in one large circle or, occasionally, two interconnected ones (amazing!).
Every once in a while an Analyst will discover the one tangle which prevents the knot from resolving itself. At this point, no other remedy being possible, an Activist can administer emergency "knot-aid" (a momentary break in hands) so you can get on to the next game.
ground, and all three try to stand up. This feat should take you just long enough to attract another onlooker. Have him join you. Four people standing up together might be a genuine accomplishment.
By this time you should realize that there's more struggling, stumbling, and giggling each time you add another person. But this very fact assures you of an endless supply of fascinated spectators, ready to join up to help you get off the ground.

A gracefully executed Mass Stand Up (any number greater than five) is like a blossoming flower-but a more rare event. To achieve it, start by sitting close and firmly packed. Then all stand up quickly and at precisely the same moment.
From THE NEW GAMES BOOK, New Games Foundation, edited by Andrew Fluegelman (Doubleday $\&$ Co, New York). Copyright to 1976 by The Headlands Press, Inc. Reprinted by permission.

# Introducing... 

 LOW BIDDER
# Challenging new management strategy game closely simulates actual competitive bidding conditions. 

NOW . . . a fascinating, real-as-life way to learn the skills, secrets, and winning strategies behind the baffling business of competitive bidding.

What People Say About... LOW BIDDER
"A Stroke Of Genius . Extremely Well Timed" J. R. Andover, N. H.
"Most Fascinating And Educational"
J. H. Philadelphia, Pa.
"Depicts Very Vividly The Aura Of Bidding"
L. A. Urbana, III.
"Really True To Life"
R. D. Denver, Col.
"Very Profitable, Interesting And Different"
P. M. Minneapolis, Minn.

## - LEARN STRATEGY OF PRICING \& WINNING MORE BIDS AT GREATER PROFITS

## - HOW AND WHEN TO OUTBID THE COMPETITION . . . PITFALLS, MISTAKES TO AVOID



It's fun. It's ingenious. And so true to life it teaches you vital business skills you can use in actual competitive bidding situations.

A leading researcher in the field of competitive bidding has developed a fast paced management strategy game that gives you a fascinating "real as life" look at conditions that face executives bidding for contracts if the manufacturing, construction, printing or any other industry. By playing LOW BIDDER you and your men absorb the same skills and profitmaking strategies used by the biggest money winners in competitive bidding to land the right jobs at the best possible price.
You learn how to select jobs on which there are apt to be relatively few bidders... how to protect your company from cult throat competition... how to estimate the best mark-up, .. and how to develop an effective strategy for nearly any competitive situation.

## FROM 2 TO 25 CAN PLAY

From 2 to 25 players begin LOW BIDDER with $\$ 100,000$ in capital, have access to the same jobs ranging in size from $\$ 100,000$ to $\$ 1,000,000$, and are subject to the same operating costs.
Individual players secretely choose which jobs they want to bid on and how much they want to bid so they have a reasonable chance of getting enough work at a fair profit. Then the low bidder is determined for each job. One round of play represents an entire year's operations, and play may continue for any number of years . . or to bankruptcy!
In LOW BIDDER, as in real life, the object is to bid low enough to obtain jobs with reasonable frequency,


The faventor of LOW BIDDER. William R. Park is a business economist at Midwest Research Institute, Kansas City, Missouri, where he has conducted original research in the fields of cost analysis, competitive bidding, estimating techniques, and cost and pront analysis. His articles lated subjects have appeared in many leading national magazines and technical journals.
but high enough to cover operating costs and return a fair profit. Anyone can bid low enough to get work. simply by bidding below costs. On the other hand, a high bid may insure a profit, but seldom wins the job. The strategic bid lies between these two exfremes. Finding the right bid requires not hit or miss guesswork, but careful, well planned strategy.
The difference between winning and losing depends upon your skill and shrewdness in choosing and bidding the available jobs. However, just as in real life, the winners generally attribute their victory their failure is due to bad breaks.

PLAY LOW BIDDER FOR 15 DAYS
AT NO OBLIGATION

Over 2,000 managers have played LOW BIDDER. Reviewers call it "most fascinating and educational" .. "a stroke of genius" ... "very profitable, interesting, and different." By playing LOW BIDDER you will learn important bidding principles and bid decision skills you can put to work for you now in actual competitive bidding situations. You will gain a better understanding of the underlying economic princlples which apply to any business. Perhaps even discover unnecessary financial risks you are taking right now. Furthermore, professional management games like LOW BIDDER usuaily require costly computers. But thanks to the ingenuity of inventor BIDER Park, the complete equipment for LOW BIDDER costs only $\$ 10$.

Send now for LOW BIDDER with absolutely no obligation to keep it. If you don't agree it's one of the most enjoyable, fascinating, and challenging games you have ever played . . . if you don't find it every bit as valuable as we say it is simply return the complete materials and owe nothing. There's absolutely no risk to you. Mail the coupon now.

Are you using hit or miss bidding methods that rob you of your share of the jobs and profits? LOW BIDDER teaches you important bidding principles and bid decision skills without involving the financial risks associated with similar real life decisions. Over 2,000 managers in all areas of business and industry have used LOW BIDDER to improve their contract bidding skills. General Electric, McGraw Hill, Clark Equipment, F. W. Dodge, and Allis-Chalmers are but a few of the companies purchasing this remarkably effective management strategy game.
BUSINESS STUDIES,
St. James, N.Y. 11780
Please send me $\qquad$ sets of LOW BIDDER for 15 day trial examination. If I am not completely satisfied I will return all game material for full and prompt refund. Bill me at the low tax deductable rates of only $\$ 10$ per game... plus 75\% per game for handling. For N.Y. State residents add Sales Tax.Check Enclosed
Bill the company (if D \& B rated) plus shipping charges. Bill me through my credit card American Express Bank Americard Master Charge Interbank \#
My Credit Card \#
Expiration Date


## BOOK SHELF



We've been looking at a lot of books lately. Some of the ones reviewed here are quite recent. Others predate GAMES, and we've included them by virture of their particular interest and quality.
The Mature Person's Guide to Kites, Yo-Yos, Frisbees and Other Childlike Diversions by Paul Dickson (New American Library, 1977, paperback, $\$ 5.95$.)

How many post-adolescents secretly hanker after those amusements we've relegated to children? You know the type, the fond father who buys 150 feet of HO track and 12 precision replica cars to indulge his 3 -year-old daughter. The premise of Paul Dickson's enormously entertaining Guide is that kite flying, yoyos, and similar pursuits are not just kid stuff. And he's got the testimony of mature persons to prove it. Did you know, for instance, that Thomas Jefferson was a crackerjack mibster? (A mibster, for the as yet uninitiated, is a marble shooter.) And even avid followers of the Congressional slate may not recall the outcome of the premier marble tourney on Capitol Hill last year. It was Missouri Representative Bill Burlison, who edged out a Maryland Senator, an Illinois Representative, and the Mayor of Pittsburgh with his trusty taw. We get the inside scoop on yoyo maven, Donald F. Duncan, a promotional genius who, early in the game persuaded one Harry L. Crosby to trill gloriously forgettable lines like these for his toy:

## What keeps my sense in a whirl

and makes me break dates with my best girl?
My Yo-Yo.
The author has compiled hundreds of similarly sprightly tidbits on kite flying, Monopoly, paper airplanes, Frisbee, and tiddlywinks. He also covers a range of rules and competitions and gets into a little consumer guiding. This is light, lively material, with plenty of pictures.
The Complete Book of Video Games by the Editors of Consumer Guide (Warner Books, 1977, paperback, \$1.75)

Here's a handy pocket guide for those who are about to join in on the video game boom. Chapter I gives a thorough account of the variety of games avail-able-ranging from the omnipresent Pong to auto racing and target shooting. You will also find tips on which video set
is right for you: depending on your TV set, the number of games you want to play, the desirability of sound, color, speed adaptors, remote control, and various other features. For the technically inclined, there's a chapter on how these electronic wonders work. For us laymen, there's advice on game strategy and the small motor skills we can hope to acquire at video play. The real consumer service is a chapter detailing the many makes and models available to the retail buyer. The authors rate 17 leading models, including useful descriptions of their various features. One wish-though retail prices vary widely: it would be nice to have at least a comparative or ball-park price to work with. Though reference is made to the "good dollar value" or "fair price" of certain sets, even this guideline is not consistently present. But the prospective buyer will no doubt go to the store himself for the hard facts, and Video Games will certainly help him know what to look for besides the price tag.

A live-action money game between two class players adorns the cover of Backgammon: The Cruelest Game: The Art of Winning by Barclay Cooke and Jon Bradshaw (Random House, 1974, paperback, $\$ 5.95$ ). Though basic moves and tactics are covered, this is not a beginner's guide. This book is for the serious intermediate who is ready to abandon all obligations for a week or two of studious dedication to the mastery of odds, tactics, and the psychology of the game. Such diligence will almost surely be rewarded with "luckier" rolls of the dice and a more favorable win/loss sheet. The casual reader will enjoy Cooke and Bradshaw's "sound commonsensical advice" and the lively presentation of their material. Of the many backgammon books available, this is one of the best.
To ape an old adage, no book should be judged solely on the merits of its cover. But the cover to Nicolaos and Vassilios Tzannes' book, How Good Are You at Backgammon? (Simon and Schuster, 1974, spiral-bound paperback, \$4.95), serves a tantalizing hors d'oeuvre to the entrees within. Pictured are three tough backgammon problems. Inside are 72 more, with concise answers provided. The solutions are so instructive that all but the tournament-level player will cull a few new gambits from these pages.

Here's a sneak preview of the Tzannes' book-two of the less complicated problems:


Situation: Look at the positions shown. If you are White, how do you play a $(3,3)$ roll and why?


Situation: Look at the situation and decide, if you are White, how to execute a throw of $(3,1)$. Why?
Are you intrigued? We won't leave you hanging.

Answer Drawer, page 60




Or just trying to get through any ordinary day-

You've probably been stumped by problems and perplexing situations more often than you'd like. We all have.
What's wrong? Intelligence, education, energy, desireyou've got 'em all. What you don't have, and what can make a huge, happy difference in your life, is an ingenious, fun-to-read new book called Conceptual Blockbusting.

## YOUR PROBLEMS HAVE MANY SOLUTIONS!

Most of us have more problems than we want. So, our natural tendency is to get rid of the problem as quickly as possi-ble-by picking the first solution that comes to mind and running with it.
That's the easy way. But not always the best.
Wouldn't it be far better if you could think of many solutions instead of one-just as easily? Wouldn't you prefer to eliminate "in the rut" thinking and hit-ormiss methods, so that you can
that inhibit us, confuse us, or obscure our view of what's good for us.

Maybe these blocks are rooted in your upbringing. Your surroundings. Even your boss.

Whatever their cause, there are ways to overcome these handicaps and improve your problem-solving abilities.

But, first, Conceptual Blockthat inhibit us, confuse us, or
busting helps you to identify your own "mental walls." For example, try this short mental obstacle course, and discover some useful and interesting things about yourself:

## Perceptual Blocks

1. Do you draw a blank when asked to draw a telephone dial with all the numbers and letters in place?

Yes $\square \quad$ No $\square$
2. Do you relate a person's hair length to his political beliefs?

Yes $\square$ No $\square$

## Cultural \& Environmental

 Blocks3. Do you believe that playfulness is for children only?

Yes $\square$ No $\square$
4. Are you plagued by an autocratic boss who values only his own ideas? Yes $\square$ No $\square$ Emotional Blocks
5. Are you afraid to take risks? Yes $\square$ No $\square$ 6. Do you prefer judging ideas rather than generating them?
wall' that is limiting your thinking... your enjoyment of living.

And for each mental wall, Conceptual Blockbusting has specific insights and information to help you get rid of it.

## BUILD UP THOSE <br> MENTAL MUSCLES!

Fascinating puzzles, games, riddles, and optical illusions-
These are the mental calisthenics Conceptual Blockbusting provides to get your "thinking form" in shape.
After spending a few hours with this unique book, you'll be able to wipe out blocks when they get in the way. And think through them easily.
As a newly-accomplished problem-solver, you'll find yourself suddenly more adroit in coming up with original and functional answers to all types of problems: From how to spend the family income to working out a master's thesis. From designing spacecraft to painting the kid's room. From newspaper puzzles to the games in Games.
At home, work, and playConceptual Blockbusting can make the difference between fun and frustration in all of your problem-solving situations!

## 10-DAY NO-RISK

 EXAMINATIONWe invite you to study this helpful guide for ten days. If you are not completely satisfied, return the copy to us and we shall refund your money in full-without delay and without questions.

So mail the coupon today. You've got nothing to lose. Except a few "walls."

A Pleasurable Guide to Better Problem

Yes $\square$ No $\square$

## Intellectual Blocks

7. Do you try to solve a problem verbally when it might be easier to think visually or mathematically? Yes $\square$ No $\square$ 8. Are you unable to eliminate unneeded or unwanted information when seeking a solution?

Yes $\square$ No $\square$

## Expressive Blocks

9. Do your ideas go unrewarded because you can't express or describe them effectively? Yes $\square$ No $\square$ 10. Are you likely to become frustrated when your fastest stenographer or typist is sick? Yes $\square$ No $\square$ For each "yes" response, you can be sure there's a "mental
more fully and satistyingly? That s what Conceptual Not with pat answers or complicated formulas, but by showing you how to free your mind so that you can see possibilities and seize opportunities that are simply not apparent to the average person whose mind is processes.

Here's how:

## TEAR DOWN

## THOSE MENTAL WALLS!

You can't see them. Or feel them. But, chances are, you've them. But, chances are, you've anbe surt

I enclose full payment of \$ in check or money order for
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President, Mt. Holyoke


Cyrus Vance Secretary of State


Potter Stewart Supreme Court Justice


Tom Seaver
Cincinnati Reds

## U.S. HISTORY TEST



By way of paying homage to the nation's Bicentennial, The New York Times challenged 20 prominent citizens, 1,856 college freshmen, and their own readers with a stiff test of their American History recall.

The Times called on a savvy set of history professors to prepare the exam, one each from Harvard, Yale, Morgan State, and Columbia. Noted historian and scholar, C. Vann Woodward, was Yale's auspicious contribution.

We reprint the test herewith and invite our readers to see how they stack up against collegiate norms. When you have evaluated your answers, it may comfort you to know that only one of the 20 prominent folks who took this test got all 24 right, and he is a ringer-David B. Truman, political scientist and president of Mt. Holyoke College. Other test-takersBetty Friedan, Phil Jackson, Kenneth Gibson, Cyrus Vance, Ella Grasso, Potter Stewart, Edward Albee, and Tom Seaver among them-didn't score as well. in fact, their average score was $81 \%$. (N.B. None of them had their personal scores published. Wonder why?) But $81 \%$ looks positively respectable next to the $56 \%$ average those first-year collegians scored. The two students who scored the highest, David Evans of Augustana College in Illinois, and Stephen Cogut of the University of Michigan, confess to being history buffs--their facts didn't come exclusively from Am. Hist. 101.

In addition to the answers, we have included figures next to each possible choice. These represent the percentage of students who selected each answer to a given question. You'll also get a brief description of where the greatest confusion lay and why.

No final grade hangs in the balance, so relax and enjoy this quiz. You'll find it a challenge. In fact, if this test were required for citizenship, we might all end up aliens.

Answer Drawer, page 61 Copyright © 1976 by The New York Times Company Reprinted by permission.

1. English colonization differed from Spanish and French colonization in that the English
(A) were the first to understand and act upon the economic potential of New World colonies
(B) came to the New World mainly as settlers rather than soldiers, missionaries, and trappers
(C) controlled vaster lands and larger populations
(D) established better relations with the Indians and blacks
2. Which of the following contributed most to the development of religious toleration in the British colonies?
(A) The stand of Roger Williams in defense of liberty of conscience
(B) The Puritan guarantee of religious freedom to settlers in the Massachusetts Bay colony
(C) The common interest of each of the numerous sects in preventing domination by any of the others
(D) The attitude of religious indifference that permeated the colonial aristocracy
3. The preamble (introductory section) of the Declaration of Independence appeals to which of the following principles?
(A) Governments founded in popular consent
(B) Strict majoritarian rule
(C) The right of all men to protection of their property
(D) The right of all citizens to vote
4. The federal Constitution explicitly authorized the
(A) creation of presidential nominating conventions
(B) power of federal courts to declare acts of Congress unconstitutional
(C) creation of the cabinet
(D) power of Congress to regulate interstate commerce
5. The Bill of Rights explicitly provides for all of the following EXCEPT
(A) freedom of speech and of the press
(B) freedom of enterprise
(C) freedom of assembly and of petition
(D) the right of trial by jury
6. The aim of the Monroe Doctrine, as it was proclaimed in 1823, was to
(A) prevent the outbreak of democratic revolutions in Latin America
(B) guarantee preferential trading rights to the United States in Latin America
(C) secure a territorial outlet for American slavery in Latin America
(D) ensure that the United States rather than Europe would be the dominant power in the Western hemisphere
7. All of the following characterized the Jacksonian Democrats EXCEPT
(A) hostility toward the institution of slavery
(B) support for freedom of economic opportunity
(C) opposition to special privilege and large business corporations
(D) opposition to internal improvements at federal expense

Questions $8-11$ refer to the shaded areas shown on the maps below.
8. Which areas did the United States acquire by purchase:
(A) (B) (C) (D)
9. Which areas did the United States acquire by annexation?
(A) (B) (C) (D)
10. Which areas did the United States acquire by war or the threat of seizure?
(A) (B) (C) (D)
11. Which areas did the United States acquire by negotiated settlement of boundary disputes?
(A) (B) (C) (D)
12. In the politics of the decade before the Civil War, the issue of slavery focused on whether
(A) racial equality should be the foremost national priority
(B) slavery should be permitted to exist in the territories
(C) slavery should be eliminated where it already existed in the states
(D) the foreign slave trade should be reopened

13. Republican policies toward the South during the post-Civil War Reconstruction era can be described most accurately as
(A) aiming consistently to protect the interests of postwar big business at the expense of the newly freed slaves
(B) leading to unparalleled corruption among the entrenched carpetbagger governors and their allies in the black dominated legislatures of the defeated states
(C) leading to significant but only partially implemented constitutional changes on the state level in the South and also on the national level
(D) leading to an effective program of land redistribution that gave to large numbers of newly freed slaves "forty acres and a mule"
Questions 14-16 refer to the following business leaders.
(A) John D. Rockefeller
(B) Andrew Carnegie
(C) J. Pierpont Morgan
(D) Henry Ford
14. Which business leader adapted the trust as a device for large-scale industrial organization?
(A) (B) (C) (D)
15. Which business leader mobilized the power of the banks to curb industrial competition and to facilitate corporate mergers and reorganizations?
(A) (B) (C) (D)
16. Which business leader pioneered the mass-production assembly line?
(A) (B) (C) (D)

Questions 17-20 refer to the following groups.
(A) Northern and Western Europeans (e.g.,

Germans and Irish)
(B) Southern and Eastern Europeans (e.g.,

Italians and Russians)
(C) African slaves
(D) Mexicans
17. For which group were the peak years of entry into the United States 1700-1800?
(A) (B) (C) (D)
18. For which group were the peak years of entry into the United States 1840-1880?
(A) (B) (C) (D)
19. For which group were the peak years of entry into the United states 1885-1915?
(A) (B) (C) (D)
20. For which group were the peak years of entry into the United States 1910-1930?
(A) (B) (C) (D)
21. The defeat of the Versailles Treaty in the Senate after the First World War was due to the
(A) growing conviction in the United States that the Kellogg-Briand Pact outlawing war posed a better alternative for the future conduct of foreign affairs
(B) widespread view in the United States that proposed neutrality legislation to prohibit citizens from traveling on belligerent ships except at their own risk would suffice to keep the United States out of future European wars
(C) inability of President Wilson and his political opponents to reach a compromise on the issue of United States participation in the collective security arrangements of the League of Nations
(D) widespread view in the United States that the League of Nations had been tainted by its admission of the Soviet Union to membership
22. Which of the following best describes the domestic changes brought about by the New Deal?
(A) The enactment of a number of new economic regulations, joined with new relief and welfare measures
(B) A vast increase in governmental ownership of business
(C) A major redistribution of income and wealth in favor of the poorest segment of the population
(D) The restoration of a free market as a result of effective antitrust action
23. In the years immediately after the Second World War, the United States assumed
(A) the dominant role in an alliance of Western nations for the purpose of containing Soviet power
(B) its traditional policy of noninvolvement in world affairs
(C) the burden of arming friendly democratic nations with atomic weapons
(D) the leadership of Third World countries seeking independence from their colonial rulers
24. Before the Supreme Court's decision in 1954 that racial segregation in the public schools was unconstitutional, the Court had
(A) refused to consider cases about racial segregation
(B) justified racial segregation in public facilities by the "separate-but-equal" doctrine (C) been prevented from considering cases about racial segregation by Southern filibusters in Congress
(D) required desegregation of public facilities "with all deliberate speed,"' but stopped short of ordering the President to enforce the decision

Hop-Around to England. Of course, the Romans did not come to ancient Britain in the interest of cultural exchange, but even an invasion has its lulls. And whenever the thrill of chari-ot-racing grew thin, the legionnaires turned to hopscotch for diversion. Envision, if you will, the splendid sight: those mighty men, in cuirasses and mail, throwing flat stones and hopping around in circles.

Here's how to do as the Romans did:
Players each have five small stones (flat ones are better). The first player stands behind a throwing line and pitches his stones onto the diagram shown to the right, either one at a time or all at once. (Pebbles that miss the diagram do not count, but those which land on a line are rethrown.) Counting the number on each section where a pebble has landed, he then adds up his score. But that's just the beginning. To earn his score, he must then hop into every space in which he has a stone, going from one to another on one foot-and missing the lines, of course. He must pick up his stones as he goes. Once he has successfully hopped in and out of a space, it is his and no other player may step in it during the rest of that round. To retrieve a stone of yours from another player's space, you must grab it while standing
in a nearby space. After everyone has had a turn, a new round begins. The order of the players remains the same, except that the first player is now last. The winner is the person with the highest score after as many rounds have been played as there are players in the game.

## Hop-Around



The Ancient Roman court consisted of two concentric circles with radii of 3 and 5 feet. Both areas were divided into eighths, the inner one like a pie, and the outer like a spoked wheel. The dividing lines were evenly staggered so as to join the smaller circle from opposite directions at regular intervals. The throwing line was placed 6 to 10 feet away from the larger circle and directly opposite the first two numbered spaces.

## Theft at a Séance



1. "One of us four is a thief." Tension was high at "The Gables," pleasant suburban home of Mr. and Mrs. White to which a few friends of Mr. White had been invited for the evening. Everyone reacted differently to the accusation. While two guests huddled intently with their hosts, one nervously paced the floor. Guilty or innocent, nobody enjoyed being under suspicion. Four of the five people present were relieved when the maid presented the card of Inspector Black.

2. The card was soon followed by the inspector himself. He listened with close attention while Mrs. White told of the theft of her valuable string of pearls.

3. The pearls were a gift from her husband who was having a most successful year in the City. She had put them on after primping, powdering, and dressing for dinner.
4. Mr. Green wished to try an experiment whereby the participants sat with hands apart instead of each touching the others. The table was arranged. Going counterclockwise around the table, from Mrs. White's left sat Green, Brown, and Dark. Mr. White, seated on his wife's right went over to the door to turn off the light.

5. The dinner-party was a rather unusual one, the guests being three men, besides her husband and herself. The men were business associates of her husband's and their names were Green, Brown, and Dark. After dinner, Mr. Green, who was a student of psychic matters, had suggested holding a small séance. The others, who had all had some experience of séances, agreed.


* Even I did not immediately grasp that this case was more than a squabble in the marbled halls of the overprivileged, so I dispatched my courtly associate, Inspector Black, to "The Gables.' "


Orestes Mountebank

6. The room was then in pitch darkness. The party sat perfectly still for about twenty minutes in concentration. Suddenly Mrs. White felt a sleeve brush against her shoulder. A hand grabbed at her throat. She screamed. Her husband sprang up and put on the light. All the guests were in their places, but the pearls were not in theirs.
8. Inspector Black got an idea of where each person had been sitting and took a quick turn round the room, which he had observed closely when he first came in.


10. The Inspector returned the case to Mr. Green, and without further inquiry told two of the guests they might go home, and asked the third to be so kind as to come along with him. As he left, he told Mr. and Mrs. White where to look if they wanted to recover the missing pearls.
7. It was clear that someone in the room must be guilty of the theft, and her husband had insisted on Mrs. White's telephoning immediately for the police.
 the police.

GAMES
Students of the criminal mentality will perceive that all the evidence which was available to Inspector Black is available to them as well. The thief was not an experienced criminal, and the various stages of his crime were improvised on the spot instead of being carefully planned out in advance. You should experience little difficulty in making the correct arrest, and further examination of the evidence will soon show you how to recover the pearls for Mrs. White.

## Charades: Bringing out the Bard

Have you ever played Charades? No, we don't mean that perennial parlor pantomime known in some circles as "The Game." Dramatic charades are just one version of the original game, which we'd like to introduce you to here.

In the 18th century some clever French wag developed the first poetic charade. His version was a kind of riddle in which a word of two or more syllables is to be deduced by guessing its individual syllables. Each syllable must be definable as a whole word, clues to which are furnished in the poem. In a word of three syllables or more, two syllables can be run together for a single definition (for example: "harmony" might come out "hour-money"). As you can see from the example, the component words will not always be exact homonyms, but they must at least be recognizable as nearmisses. Another must is some indication of the order in which the component syllables should be arranged. And the final verse or couplet of the poem should offer an overall description of the charade's solution.

## Sample Charade with Explanation:

The laundry one and two comprise.
2,000 pounds the third one's size.
The birth of a nation did he bequeath Our country, and his wooden teeth.

The first and second syllables ("one and two") together define laundry-i.e. "washing."
The third syllable describes "ton."
The final couplet gives a clue to the over-
all solution-"Washington."
We invite you to solve the charades on the right. But that's not all. This contest has two requirements: in addition to solving our charades, we'd like you to write one for us. We took Presidents for our theme. The theme for contest submissions will be GAMES-parcheasy, check-hers, or whatever else strikes your fancy. Make sure that the game you choose to immortalize in verse is one with which most people are familiar and keep your charade to a maximum of 12 lines. Each of the five entries we judge the best will appear in the JanuaryFebruary issue of GAMES.

## Contest Charades

I
Verity the first extends. The second from the ape descends.
Ever frank and always homey, This Pres hailed from the state of "Show Me." II
The first attempts a glance, a wink. The second turns dawn's fingers pink.
The third and fourth, combined, include Fifteen degrees of longitude.
While this man ruled ourpost-warnation, The Court said "no" to segregation.

## III

A summer breeze the first describes, Or the drink a thirsty throat imbibes.
The second is a rocky thrust, A climber's foothold, if he must.
A stern Vermonter, prized for calm, Did this man's plans prove bomb or balm?

## IV

Add the fruit of a pine, the second part, To the gap in Darwin's chain, for a start.
Known for debate, yet he failed to court The T.V. audience's support.

V
The first's a snouty sort of fish, The streamside angler's ardent wish.
The second is a grassy plot Where cows and sheep are wont to trot. In his brief term as Chief of State, He proved that southpaws can be great.

POSTMARK DEADLINE: 9/23/77
FIRST, SECOND, AND THIRD PRIZES: A personalized crossword-puzzle trophy, handsomely engraved on copper plate and specially constructed to incorporate your full name, street, city, and state among the solutions.
AND TWO HONORABLE MENTION PRIZES: A year's subscription to GAMES magazine.

Clip or copy this entry blank and mail it to:
My solutions are:

My original charade is:
GAMES MAGAZINE
CHARADES \#1
515 Madison Avenue
New York, NY 10022

Name
Address $\qquad$



At night all you can see of another ship is its lights-at least until it may be too late to avoid a collision. All vessels must display some sort of navigational lights when they are underway at night. The International Rules of the Road, on which this puzzle is based, specify exactly what lights a large motor vessel must carry at night, including where they must be placed, how many there must be, of what color, and how they must be hooded so they can be seen only from certain directions. (A different set of rules, the Inland Rules of the Road, applies to vessels operating only in enclosed waterways.)


1. What is the minimum distance of these two vessels from you? 2. Which of these two vessels is steaming from left to right as you are looking at them?

2. What is the direction of movement of the vessel(s) you see? 2. If a tow is involved, how much do you know about it? 3. Is there a danger of collision? 4. If there is, which relative direction should you turn?

By displaying these combinations of lights, a vessel warns other vessels of its presence. Equally important, if the man on watch knows how to "read" these combinations of lights he also can learn a great deal about another vessel's course (direction of movement) and aspect (relation between his vessel's direction and the other's). In some cases a vessel must also display special lights to indicate that it is restricted in its ability to maneuver, either because of physical characteristics (a barge, for example) or because of the activity in which it is engaged (a tug towing a barge, for example).


1. Is either of these two vessels towing? 2. Which way are they heading? 3. Is there a danger of collision between you and either ship? 4. If so, which relative direction (right or left) should you turn?

2. What do you see ahead of you? In what relative direction is the oncoming vessel or vessels heading? 2. If this is a tow situation, what kind is it? 3. How many vessels are involved? 4. Is there a danger of collision? 5. If there is, in which relative direction should you turn?

3. What do you see ahead of you? In what relative direction is the oncoming vessel or vessels heading? 2. If any of these are tow situations, what kind are they? 3. How many vessels are involved? 4. Is there a danger of collision with you? 5. If there is, in which relative direction should you turn?

Copies of the Book of International Rules of the Road are available free of charge from your local U.S. Coast Guard Inspection Office, if you want more complete information on this subject than the simplified explanations and situations used in this article.

The numbered illustrations below simulate five situations which you would-if you were on watch at night-have to interpret. The terms and other data necessary to "read" them are provided below. The location and direction of your own ship are indicated by an arrow.

If you survive, you will find the correct answers in the Answer Drawer section on page 61. Look sharp, now!

## TERMINOLOGY

Power-driven vessel: Any vessel propelled by machinery.
Tow: As used in these examples, a tow is a vessel underway but not currently moving under its own power. It may be attached alongside a pow-er-driven vessel, or another vessel may be pushing it or towing it behind on a cable.
Underway: Not at anchor, nor made fast to the shore, nor aground.
Arc: The area of visibility of navigation lights along the horizon. Arc is specified in degrees. A light with an are of $360^{\circ}$ could be seen from any point on the water around the vessel. However, most lights are hooded so they cannot be seen from certain directions.
Masthead light: A $225^{\circ}$ white light at the forward masthead, showing an arc of light from dead ahead to $22.5^{\circ}$ abaft (behind) the beam (an imaginary line across the middle of a ship) on both sides. Visibility: 6 nautical miles.
Range light: A white light like a masthead light, in all respects, but carried abaft of and higher than the masthead light. It is in line with the masthead light, so the lights seem to be direcily above and below each other if the vessel is seen from dead ahead. Note: A power vessel less than 50 meters long is not required to carry a range light but, for simplicity's sake, assume that all power vessels are 50 meters or more in length.
Stern light: A $135^{\circ}$ white light showing an arc of $67.5^{\circ}$ from directly aft (behind the ship) on each side.
Sidelights: A red light on the port (left) side, and a green light on the starboard (right) side. Each is visible over an arc of $112^{\circ}$ showing from dead ahead to $22.5^{\circ}$ abaft the beam on their respective sides. Visibility: 3 nautical miles.
Towing masthead lights: Two or more lights of the same character as the $225^{\circ}$ masthead light. If the length of the tow exceeds 200 meters, the towing vessel must carry two towing lights in addition to the masthead light-a total of three lights.
Head-on situation: When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision, each shall alter its course to starboard so that each shall pass on the port side of the other. When a vessel is in any doubt as to whether such a situation exists, it shall assume that it does exist and act accordingly.

## States



If the energy crisis kept you close to home this summer, here's a chance to catch up on your traveling without putting a strain on your pocketbook. (You may however strain your brain, your eyes, and your patience on this one.) We've selected 21 maps of real places for you to identify by the state they are in. Some you may already have visited; others you may never have heard of. In each
map there is at least one real clue, but some contain misleading features, so don't jump to conclusions. Two are traps because they are not in any state. (Which are they and where are they?) If you get all 21 right-and we bet you won't, even with the help of reference books--you deserve a medal (St. Christopher's?). Ten right without help, and you're a journeyman; fifteen is a tour de force.

## Answer Drawer, page 61.



September/October 1977





Believing clever minds go with crafty fingers, we introduce the first of our "I-want-it" projects, geared to the do-it-yourselfer.

## Chess \& Backgammon Poncho

Here's a poncho for playing backgammon or chess alfresco whether that means the beach or your own backyard. To make the poncho, first lay out $33 / 4$ yards of 45 -inch velour terry cloth flat on the floor. Then follow the drawings below to cut the two main triangles and an extra pocket piece.


## Folding and Cutting



1. Fold corner $A$ to point $C, 45$ inches along bottom of fabric. Cut along fold line BD. Save the cutaway piece for pocket.

2. Fold corner $D$ to point $E$, making two 45 inch right triangles with fabric doubled (BCD and BCE ), or one large triangle with a 90 -inch selvage base if fabric were laid flat (BDE). Cut on line BE . This large triangle is front of poncho. $F$

3. Fold corner $B$ to point $F$, creating another large 90 -inch selvage based triangle. Cut on line EF. This triangle is back of poncho.

4. You now have two triangles, each with a 90inch base, $635 / 8$-inch sides, and 45 inches between the base and apex.

Setting the terry pieces aside, cut three 22 -inch squares of cotton, two in yellow, one in blue. Pencil-grid a chessboard with $23 / 4$-inch squares ( 8 squares by 8 squares) on blue fabric. Pin blue fabric over one piece of yellow. Zigzag-stitch along the grid. Then cut away alternating blue squares to expose yellow under-

neath. Cut carefully-close to the edge of the zigzag. Center chessboard along selvage of velour side of poncho front. Zig-zag-stitch it on. Sew Velcro circles onto the squares.


Cut 24 green and 24 blue cotton triangles 8 inches high and $13 / 4$ inches wide at base. Alternate triangles on yellow squares to form backgammon board. Leave a 1 -inch center lane between right and left sides of board. Baste down, zig-zag-stitch on. Center board along selvage of velour side of poncho back. Place Velcro down middle of each triangle, as shown in the photo above right.


Straight-stitch rope border around each board. Seam poncho sides together along selvage, leaving a 15 -inch slit in center of seam for head to go through poncho.
Border poncho with bias strips of cotton. Cut four strips of yellow cotton 5 inches wide, two of them 66 inches long and two 73 inches long. Press $1 / 2$-inch hem on long edges of all strips. Then press strips in half, lengthwise. (Strips will look like blanket binding.) Zigzag-stitch short strips to opposite sides of poncho.


One inch of fabric will overhang all corners. Now zigzag-stitch long strips straight across the two unfinished sides. Fold back extra fabric ends of long strips. Self-hem; then zigzag the hem to meet the existing stitching on the shorter strips.


Out of extra terry, cut a 5-by-7-inch pocket. Hem one 5 -inch side. Zigzag the other three sides to the poncho so the pocket straddlies the seam. Sew in Velcro sealing tabs.


Cut chess pieces out of vinyl place mats-white and blue: eight pawns, two knights, two rooks, two bishops, a king, and a queen from each color. Cut 15 blue and 15 white backgammon circles $11 / 2$ inches in diameter out of two more mats. Put Velcro on back of all pieces.

# The Magic Game and How to Play It 

by Charles R. Reynolds



Charles Reynolds has been involved in the magic game as an author and performer for over 25 years. In recent years he has served as magic consultant on Doug Henning's "World of Magic" specials on NBC television and, with his wite Regina, is co-author of 100 Years of Magic Posters, an illustrated book on the flamboyant advertising of the great magicians.


Magic has often been humorously referred to as "the second-oldest profession." This is arguably true, for the roots of the magic performed by magicians today on stage and television, as well as in the more intimate surroundings of the living room, restaurant, or hospitality suite, stretch far back into prehistory where magic, religion, and shamanism were inseparably intertwined.

But magic as a hobby and as a game that people play for their own amusement, as well as (hopefully) for the amusement of others, is only about a century old.
As recently as the turn of the century, even the most basic secrets of magic were relatively hard to come by. There were precious few books, and admission to the shops which sold magic effects to performers was almost on an "invitation only" basis. Certainly an aspiring magician of the early 1900 s could go to a magic emporium such as Martinka's (founded in 1873) on New York's Sixth Avenue and buy a simple trick that often launched him into a lifelong enthusiasm for the magic game. But, before he was allowed into the inner circle of Martinka's "little back room," a considerable amount of proof of both aptitude and seriousness of purpose was necessary.
The first general magic text of any importance was written by a magic hobbyist, not a professional. The author was Angelo Lewis, a London barrister and amateur conjuror who wrote the book Modern Magic in 1878 under the nom de plume of Professor Hoffrnann. It is still one of the best books ever written on the art of legitimate deception, though many of the tricks, and indeed the literary style itself, may seem charmingly Victorian in tone.

A few years ago, if one were to ask at a bookstore for a book on magic, he would be lucky to find even one or two. Today, most of the large stores have more than a dozen in both hardcover and paperback, with more appearing every week. The major American magicians' societies, the International Brotherhood of Magicians and the Society of American Magicians, have increased their memberships by the thousands; Doug Henning's NBC magic specials have been among the most popular television shows of the year; and a musical comedy (with only average score and book but with excellent magic) called the Magic Show is well into its third year on Broadway and is still playing to packed and enthusiastic houses.

More people today want to play the magic game than ever, both as participants and as enthusiastic members of the audience. Why this sudden and dramatic upsurge of interest in one of the oldest and most enduring of the performing arts?

Perhaps to best understand this magical renaissance, we should look briefly at the reasons for its near eclipse during the period of the early 1950s to the mid1970s. During that period, there were always enthusiastic amateurs (of widely varying abilities) who belonged to the magic societies, subscribed to the magazines, patronized the magic shops, and avidly studied the several hundred magic books published each year, not for the general public but for the enthusiastic players of the magic game. For the general public, however, perhaps the materialistic concerns of the postwar years made magic seem a bit frivolous. Whatever the reason, there were precious few places where one could see a really great
magician perform. Vaudeville was virtually dead and the legitimate theatres in the smaller towns of America had been replaced by radio and movies. Television, the star-making entertainment medium of the new age, was on the rise, and some magicians appeared on it. But television, like film, is almost too good a trick in itself, and the possibilities of deception through camera and editing are so great that magicians are still hard at work bridging the credibility gap in the newest and currently, most important mass-entertainment medium.

Since the retirement of Blackstone in the mid-1950s (he died in 1965), there was no major American magician recognized by the general public, and this remained true until young Doug Henning (who, with his flower-child image and tight-fitting, blue-jeaned garb completely turned around the traditional image of the master magician) exploded on Broadway as the star of the Magic Show. At the same time, there was a great upsurge of interest in close-up magic-those intimate feats that can be performed right under the spectators' noses with coins and cards and other small objects. Hollywood's unique private club for magicians and magical enthusiasts, the Magic Castle, became a mecca for the best close-up magic talents in the world and now, years after its inception, remains a major center of magic activity for those who are members or those lucky enough to know someone who will take them as a guest.

After 25 years the performance of magic had again captured the interest of the general public.
Magic, as defined by the great John Mulholland, is "the art of creating illusion agreeably." There is nothing less interest-
ing, even to a devoted magic enthusiast, than magic robbed of its mystery, and there can be no greater injustice done to magic than to simply explain the mechanics of how the tricks are done. This only results in a destruction of the sense of wonder without which magic degenerates into the dull presentation of a few lackluster puzzles. The real secrets of magic cannot be exposed anyway. A person who has had it all explained to him can still be fooled the very next day (and with the very same methods) by a skilled magician. The real secrets of magic lie in the psychological link the magician creates between himself and his audience.

Just as the most talented pianist in the world has only a limited number of keys-white and black-which he can combine to create his illusion of beautiful sound, so the most talented magician has a very limited number of effects that he can draw on to create his mysteries. A magician can make something mysteriously appear-or he can make it vanish. By combining these two effects he can make something vanish from one place and reappear in another. He can also transform objects making them change in size or shape or color. He can apparently destroy an object and restore it again, or pass one solid object through another, or make something float in the air, all in defiance of natural law. He can give apparent life to inanimate objects, making a handkerchief dance, as if alive, or selected cards mysteriously rise from a pack. These and a few other basic effects make up the palette with which the skilled magician paints his mysterious performance.

Doug Henning opened his first TV special by making a nickle disappear from the palm of his hand. Observed in closeup by the television camera, it was astonishing. On his next special, he opened his performance by making a live elephant disappear. He accomplished both feats by very different methods, but they were really the same in the spectrum of effects available to the magician. Something was made to disappear.

## The disappearing coin illusion

Learning how to make a coin disappear is a good trick to begin with because it illustrates several of the important principles basic to the performance of any illusion. It is a simple trick, with baffling effect if skillfully performed, but it requires practice and an attention to detail. Work on it long enough to attain that skill or don't attempt it at all. Nothing is more painful (or less entertaining) than watching a good magic trick bungled.

You are going to fold a small piece of paper around a coin. Then you are going to set fire to the piece of paper, and the coin will be gone-apparently consumed in the flames. There must be no tricky "moves" that will telegraph to the onlookers that you have done something suspicious. Everything must be clear and
direct. Complicating and confusing elements are hallmarks of badly performed magic.

If possible, borrow the coin (a quarter is good, but with practice any size may be used) and the piece of paper. A 4 -inch square ripped from the corner of a newspaper is ideal, but use any size or paper that works for you.

1. Show the coin and the paper freely, letting it also be seen that your hands are empty, but without commenting on the fact. This would seem like a simple action, and it is, but two important principles of good magic come into play at this very early stage of the effect. First-you show the paper and the coin but you do not tell your audience in advance what you are going to do. This gives you a great advantage on them. Since they do not know exactly what is going to happen, they are not in a position to try to catch you at it. Second-by your handling of the coin and the paper, you show your hands to be empty. You never make a direct statement that they are empty. Implication is much more powerful than direct statement. Throughout the handling of the effect, the audience will be subtly reminded of the fact that your hands are empty. By implication, they will be conditioned to this fact. Then, at the one point in the handling when your right hand is not empty (you are concealing the coin which you have spirited away), it will not be questioned.

2. Hold the square of paper parallel to the floor in the left hand, thumb on top and fingers underneath. Show the coin in the right hand and place it on the square of paper, holding it in place with the left thumb. Tilt the paper toward the audience (fingers behind, thumb in front, holding the coin in place).

3. Now you are going to fold the paper around the coin but, you will do it in a
very special way. With the paper tilted forward, grasp the upper right-hand corner with your right hand (first two fingers in front and thumb behind). Now, keeping hold with the right hand, tilt the left hand toward you so that the bottom third of the paper is folded over the coin. At this point, the coin should be concealed from the audience and the paper held in the left hand with fingers in front and thumb in back holding the coin in place. The bottom part of the paper is now folded up so its top edge is about $1 / 4$ inch above the top edge of the coin.
4. Now the right thumb and forefinger take over the job of holding the coin securely in place in the paper as the left thumb and fingers fold over the left side of the paper toward the audience, leaving at least $1 / 8$ inch of space between the fold and the left edge of the coin. The left

thumb and fingers now grip the coin as exactly the same fold is made by the right hand. Remember the fold is toward the audience, and at least $1 / 8$ inch of space is left between the fold and the coin.
5. At this point, it would seem to the audience that, if the top of the paper were folded forward, the coin would be completely folded inside. But this is not true because of the fact that the original front fold is almost an inch higher than the back fold (clever, these magicians!).

6. Now fold the top part of the paper forward at exactly the point where the top of the back fold reaches the front fold. In other words, only the front part of the paper is folded forward, leaving an opening (at the fold) where the coin can slip out. During all of this folding, both the right and left hands are continuously seen to be empty (imply-don't state!).

7. Transfer the packet so that it is held parallel to the floor between the thumb and forefinger of the right hand (with the fold, and the opening through which the coin can slip, facing backward toward the base of the right thumb).
8. You must now make sure that the coin will easily slip out of the packet when you are ready for it to do so. Hold the packet nearly flat (parallel to floor), tilted down slightly at the front, and pinch the packet very slightly between the thumb and finger. This should bellyopen the slit through which the coin can pass. Shake the packet from side to side. Because you had folded the paper with a bit of space at each side of the coin, it will slide from side to side and you and the audience will be able to hear it. Shake the packet by the spectator's ear and then look him directly in the eye. He will look at you. When your eyes meet (not before), ask him, "Do you hear the coin?" He will say, "yes." Now, still holding the packet the same way, extend it to him and say, "feel it." He does. Now comes the crucial moment when you must steal the coin out of the paper. Again, look the spectator in the eye, and when

his eyes meet yours (not before) ask, "Do you feel it?" As he answers "yes," slightly move in the fingers of the right hand (which have been held out exposing the empty palm) until the back edge (where the opening is) is resting on top of your curled right fingers. At the same time (remember he is looking at you and saying, yes, he feels the coin), move your right hand back a bit and stop. The hand stops but the coin keeps going (remember inertia!), where it falls neatly into the natu-rally-curled fingers of the right hand. The coin should be free to slide out easily because of your not having previously shaken the packet. If it does not, don't panic. Simply go to another spectator and have him listen to the coin and also feel it.
9. As soon as the coin falls into your It's like the best of all board games rolled into one.


Othello. The game of games.

## Gabrie


naturally-cupped right fingers, reach over with the left hand, grasp the packet, and move it to your left, holding it about a foot higher than the right hand, which conceals the coin. Look at the packet. Wait an instant and let your right hand drop naturally to your side. Keep your eyes on the packet in the left hand.
During this entire sequence, you make use of one of the most powerful tools of the magician-visual misdirection. The first principle of visual misdirection is that the audience will look where you look. When you look at the spectator, he will look at you (thus allowing you to get the coin out of the paper. When you look at the packet, he will look at it, thus allowing you to keep the coin concealed in the right hand without his noticing it. The second principle of visual misdirection is that the spectators' eyes will always follow a moving object instead of one which is at rest. This is why, when the left hand takes the packet to hold it in the air, the right hand remains still for a moment and then drops naturally to the side. The fact that all movements must be natural is a third rule of visual misdirection. Natural movements go unnoticed, while unnatural ones call attention to themselves. If the right hand simply drops naturally to the side and does not sneak down as if it conceals something (which, of course, it does), then the people in the audience will keep their eyes
on the folded paper packet which is, of course, where you want them to be looking.
10. At this point, you have a coin concealed in your right hand while the audience thinks (or should think) it is in the folded packet in your left hand. Your next problem is to ditch the coin. If you were to try to slip the coin into your pocket, you would very likely get caught, so you must find a reason to go to your pocket. An important rule of good magic is that all movements must be motivated. You cover this with a question. Ask the spectator, "Have you ever heard of people who have money to burn?" As they answer, place your right hand in your pocket (while you're in there, leave the coin!) and remove a packet of matches. Hand them to the spectator and ask him to light the paper. You can subtly allow your hands to be seen empty at this point because you are "clean," and the effect, as far as you are concerned, is almost over. Almost, but not quite. You must now act out your own astonishment that the coin has dissolved in flame. But don't ham it up. Good acting at this point-so good that the magician himself appears to think the coin should not really have disappeared yet, as if some mysterious force had taken over-is a trick that triggers the applause. Recover your composure and bow modestly.
?

## Answer Drawer



## The Sacred Apple (Page 10)



Eyeball Benders (Page 6)

1. Hot-pad mitt
2. Matches
3. Pig snouts
4. Record
5. Birch bark
6. Target (human image)
7. Flip top
8. Dictionary index tabs
9. Q-tips
10. Radiator
11. Cigar clippers
12. Cider press
13. Ruler
14. Sneaker sole
15. Pineapple
16. Scissors
17. Coke label
18. Scrubbing pad
19. Crushed cars
20. Wagon wheel
21. Guitar
22. Sponge
23. Thinker

Why Was this Picture Taken (Page 18)

1. Joe E. Brown, Chatterbox
2. James Cagney, Man of a Thousand Faces
3. Lionel Barrymore, Witch of Timbuktu
4. Jack Benny, Charley's Aunt
5. Ray Boiger, Where's Charlie?
6. Alec Guinness, Kind Hearts and Coronets

Chess Problems (Page 22)

1. There are two solutions: A. White moves his queen one square forward (check), and Black must capture the queen with his rook; White's rook recaptures with check, and Black's rook must take White's rook; White recaptures Black's rook with checkmate. B. White captures Black's rook with his queen (check), and Black must capture White's queen with his remaining rook; White moves his rook forward to the end of the board giving check, and Black's rook must take White's rook; White's remaining rook captures Black's rook with checkmate.
2. White moves his queen three squares forward. If Black takes White's queen with his pawn, White captures Black's rook with his own rook, giving checkmate. If Black does not capture White's queen (makes any other move), White puts his queen in front of Black's king, giving checkmate.
3. White moves his queen forward three squares. (The queen threatens to checkmate by capturing the pawn in front of Black"s bishop next move.) This leaves Black with three options: A. If the pawn in front of the bishop captures the queen, White's bishop moves up next to the knight, giving checkmate. B. If the pawn in front of the rook captures the queen, White's bishop checks from the right edge of the board, Black blocks check with his rook, and White's
rook moves forward to the end of the board, giving checkmate.
C. If Black moves his rook instead of capturing White's queen, the queen takes the pawn in front of the bishop (check), Black moves his king to the only retreat square, and the queen captures Black's bishop, giving checkmate.
On most other starts by White, Black can either move his bishop or advance the pawn in front of his king, delaying checkmate beyond three moves.

What Makes Crossword Puzzles Tick? (Page 23)

1. Isolated areas-this puzzle is really five separate puzzles.
2. A two-letter word (in center vertical row) and no fewer than nine squares without perpendicular interlocks.
3. Excessive black-to-white
ratio
(21\%).
4. A large proportion of short wordsfew long words.
5. Too big a format ( $27 \times 27$ ), with well over 200 words.
6. Not the same upside down as right side up flawed at least twice in this regard).

## All The News That's Fit to Fashion

 (Page 42)(From the Galleries catalogue of Fashon Institute of Technology.)

1. 1860-Collarless jacket of off-white wool with silk taffeta plaid skirt. Jacket gift of Margaret Riggs; skirt gift of Mrs. Albert Van Nostrand.
2. 1957-Short-sieeved dress of light blue silk taffeta by Balenciaga. Gift of Rodman Heeren.
3. 1920-Tunic of crème silk crepe with matching underdress. Gift of Mrs. C. Phillip Miller.
4. 1855-Short-sleeved dress of yellow taffeta. Gift of Mrs. Van Nostrand. 5. 1887-Dolman of brown velvet trimmed with ostrich; bodice and skirt of mocha silk taffeta trimmed with cut velvet piping. Dolman gift of Emma Crompton Trainer; bodice and skirt gift of Mrs. Van Ness.
5. 1925-Black wool-knit swimsuit with red and white appliqué detail. Gift of Edith Raymond Locke.
6. 1967-Long-sleeved overblouse of turquoise silk chiffon covered with iridescent paillettes; matching underdress, by Donald Brooks. Gift of Lauren Bacall.
7. 1932 -Sleeveless dress of pleated peach silk chiffon with matching bolero; peach silk crepe slip. Gift of Mrs. Adam Gimbel.
8. 1977-Black jersey bikini. Gift of Jantzen, Inc.
9. 1965-Pistachio wool coat with matching skirt; pair of crème kid boots and hat of natural straw by Courrèges. Gift of Mrs. Lewis Iselin, Jr.
10. 1915-Suit of beige basket wool weave trimmed with silk tassels and black satin. Gift of Mrs. William Rockefeller and Harriet Van Kennen.
11. 1922-Sleeveless underdress of silk crepe in multi-colored oriental motif; wrap dress of black satin. Gift of Mrs. Jerome Kilty.
12. 1880-Long dolman of gold and rust; dress of brown silk taffeta. Dolman gift of Peggy Westerfield; dress gift of Margaret Riggs.
13. 1976-Jump suit and jacket of red silk jersey by Galanos. On loan from James Galanos.
14. 1845-Dress of mauve moiré taffeta. Purchase.
15. 1820-Tennis dress of sheer linen with short puff sleeves. Gift of Thornton C. Thayer and Mrs. Waldo McCutcheon McKee.
16. 1947-Strapless black taffeta dress with bodice and scarf of pink and white striped silk by Schiaparelli. Gift of Alexandra Danilova.
17. 1903-Bodice and skirt of gray silk net with silk taffeta appliqués. Gift of Sons of the Revolution.

## Book Shelf (Page 46)

First problem. There is really only one excellent play in this situation. Play two of the threes from B11 to W8 hitting Black's blot on this position. Then play the builder from W10 to W7 for the second hit, and continue with the same plece to W4.
This play hits two of your opponent's pieces, covers your blot on $W 4$, and leaves no vulnerable blot of your own. Only the cardinally greedy would expect more than that from a single backgammon play.
Second problem: No matter how you play it you cannot win the game unless you throw a high doublet on your next turn (and Black does not.) The best move is to play the three outside (W11W8) and then play the one W6-W5. This gives you a chance to win with throws of $(5,5)$ and $(6,6)$. Any other play eliminates the $(5,5)$ throw.
It can be shown over and over again that rushing inside your inner table is a serious error. You should make a similar play with throws of $(4,1),(2,1)$ and $(1,1)$.

## U.S. History Test (Page 48)

The correct answer is marked by an asterisk ( ${ }^{*}$ ), and the numbers show the percentage of students choosing each
$\begin{array}{llll}\text { option. } \\ \text { 1. A. } 15 & \text { B. } 78^{*} & \text { C. } 5 & \text { D. } 2\end{array}$
(A) is wrong because the French and Spanish were as aware as the British of the economic potential and, in fact, acted earlier to exploit it. Only students who scored low generally missed this question.
2. A. 16 B. 38 C. $35^{*}$ D. 11

Students choosing (B) did not realize that Puritans insisted on religious conformity. Some very good students chose (A), correctly identifying Roger Williams with religious liberty but overestimating his impact.
$\begin{array}{lllll}\text { 3. A. } 56^{\star} & \text { B. } 7 & \text { C. } 31 & \text { D. } 6\end{array}$
Protection of property, the most popular wrong answer (C), was commonly cited, with life and liberty, as an 18th Century right, but Jefferson used "pursuit of happiness"' because he thought Europeans would be more likely to sympathize with it.
$\begin{array}{llll}\text { 4. } & \text { A. } 9 & \text { B. } 48 & \text { C. } 16\end{array}$ D. 28 *
(B) the power to declare Congressional
(B) the power to declare Congressional
acts unconstitutional was never given
to the courts directly. The Supreme 1803 first asserted this authority in its 1803 decision in Marbury v. Madison. 5. A. 2 B. $73^{*}$ C. 11 D. 14 A "peak" topic most students knew. Above average scores were achieved by Western students ( $78 \%$ ) and by students identifying themselves as politically left or right ( $76 \%$ ).
6. A. 10 B. 24 C. 7 D. $59^{*}$

As in most questions on diplomacy, male students did better than females $(66 \%$ to $51 \%)$. Commercial treaties negotiated shortly after the Monroe Doctrine provided that the United States be put on a par with Latin America's other trading partners.
$\begin{array}{llll}\text { 7. } 41^{*} & \text { B. } 11 & \text { C. } 22 & \text { D. } 25\end{array}$
Black students did about as well as whites in knowing that Jacksonian Democrats were not characteristically hostile to slavery. Students in the political middle outscored students on the left.
$\begin{array}{rllll}\text { 8. } & \text { A. } 2 & \text { B. } 5 & \text { C. } 84^{\star} & \text { D. } 4 \\ \text { 9. } & \text { A. } 16 & \text { B. } 48^{*} & \text { C. } 6 & \text { D. } 26 \\ \text { 10. } & \text { A. } 9 & \text { B. } 37 & \text { C. } 7 & \text { D. } 43^{*} \\ \text { 11. } & \text { A. } 57^{*} & \text { B. } 12 & \text { C. } 10 & \text { D. } 18\end{array}$ On these four related questions, students overwhelmingly knew the purchase of Louisiana and Alaska, but had difficulty with the other means of territorial expansion. Students tended to confuse territories added by annexation, such as Texas, with those acquired by war or the threat of seizure, such as the Mexican Cession that included California.
12.
12. A. 4 B. $58^{*}$ C. 31 D. 6

Although (C), the most popular wrong answer, was what the abolitionists wanted, Lincoln's policy was to contain slavery. The question differentiated sharply between the most able students and the least able. It was answered correctly by $82 \%$ of the top scoring third of the students compared to $39 \%$ of the lowest third, a greater than average spread between the two groups.
$\begin{array}{lllll}13 . & \text { A. } 17 & \text { B. } 36 & \text { C. } 32^{*} & \text { D. } 15\end{array}$ (B), which drew the most responses and attracted a large number of the best students, reflects a common myth. The post Civil War corruption in the North was as bad as the South's; the carpetbaggers were not entrenched but rather were turned out of office in most southern states before the end of Reconstruction; and blacks achieved a short-lived majority in only one state legislature, South Carolina's.
$\begin{array}{lllll}\text { 14. A. } 39^{*} & \text { B. } 32 & \text { C. } 23 & \text { D. } 6 \\ \text { 15. A. } 32 & \text { B. } 21 & \text { C. } 44^{*} & \text { D. } 3 \\ 16 . & \text { A. } & \text { B } 3 & \text { C } 3 & \text { D. } 93^{*}\end{array}$
Students made their best score of any Students made their best score of any
question on the test in identifying Henry question on the test in identitying Henry bunk,'" but the wrong answers on 14 and 15 suggest a blurring of the images of Carnegie, Morgan and Rockefeller. In 1943, 71\% of the students identified Rockefeller correctly as an oil tycoon.
$\begin{array}{llll}\text { 17. A. } 23 & \text { B. } 6 & \text { C. } 65^{*} \text { D. } 5 \\ \text { 18. A. } 43^{*} & \text { B. } 50 & \text { C. }\end{array}$ $\begin{array}{lllll}\text { 18. A. } 43^{*} & \text { B. } 13 & \text { C. } 23 & \text { D. } 20 \\ \text { 19. A. } 24 & \text { B. } 50^{*} \text { C. } 7 & \text { D. } 19\end{array}$ $\begin{array}{lllll}\text { 20. A. } 13 & \text { B. } 32 & \text { C. } 4 & \text { D. } 52^{*}\end{array}$
Students tended to know when the people who populated their region of the country had arrived. Westerners outscored all others, 57 to $49 \%$, on the Mexican immigrants (20); $54 \%$ of the Easterners were right on Southern and Eastern Europeans (19) compared to $43 \%$ of Southerners, and Midwestern siudents scored $49 \%$ to $41 \%$ for oth-
ers on the Germans and lrish (18). Blacks did essentially as well as whites on when the slaves were brought in (17). One major misconception was that large numbers of Southern and Eastern Europeans continued to arrive after World War I.
21. A. 13 B. 15 C. $60^{*} \quad$ D. 13 More than the usual number of students ( $17 \%$ ) simply skipped this question which required fairly detailed knowledge as well as a sense of chronology. (A) refers to an issue in the 1920's, and (B) and (D) to issues in the 1930's. Eastern students did better $(66 \%)$ than those in other regions.
22. A. $64^{*}$ B. 9 C. 13 D. 14

The most popular wrong answers, (C) and (D), did not happen, although there was an antitrust campaign late in the New Deal. Students on the political left were more apt ( $67 \%$ ) to get this right, as were students who said their high school courses had emphasized conceptual approaches to history (69\%). 23. A. $68^{*}$ B. 11 C. 8 D. 13 As in other diplomatic questions, white males scored the highest and students on the political right or left outscored those in the middle $70 \%$ to $66 \%$. 24. A. 10 B. $69^{*}$ C. 9 D. 11

The phrase "all deliberate speed" did not even occur in the 1954 Brown v. Board of Education decision but in a 1955 Supreme Court decision. Southern students did worst on this, $66 \%$, while Westerners did best, 74\%.

## Theft at a Seance (Page 50)

Mrs. White powdered her back and shoulders before dressing. You see her long-handled powder puff in picture 3. The thief in grabbing the pearls brushed Mrs. White's shoulder with his sleeve-and acquired the powder mark you can see on the inside of Dark's left sleeve in picture 1. When the Inspector arrived and search was imminent, it became necessary for him to conceal the pearls and trust to luck to getting them back later. Dark chose the decanter on the sideboard. He slipped the pearls in while the Inspector was examining the table-under cover of heiping himself to a cigar-thereby altering the level of the wine. It had been at the bottom of the neck when the inspector first came in (see picture 1) but now (by picture 10) it was at the top. Also the cigar box had been moved. Only one man, Dark, was smoking a cigar, and he had a patch or powder on the inside of his left sleeve where he would naturally brush Mrs. White's shoulder in reaching over from the place where he was sitting. Dark was clearly the Inspector's man.

## Night Watch (Page 53)

I 1. Probably three miles or more, because otherwise the sidelights would also be visible. Note also that the masthead lights appear to be low on the horizon. 2. Vessel to the left.
II 1. No. These are two power-driven vessels without tows. 2. Left-Meeting your ship on reciprocal course so as to involve risk of collision. Right-Crossing your bow from right to left, so as to involve risk of collision. 3. Yes, certainly the ship to the left, possibly the ship to the right. 4. Turn to starboard.
III 1. A power-driven vessel towing astern. It is towing from right to teft across your bow. 2. Length of tow does not exceed 200 meters. It is towing two other vessels. 3. Yes. 4. Turn to starboard.
IV 1. You see three situations. The one on the left is heading to port of you. The one in the center is crossing your bow at an angle, from port to starboard. The one on the right is on an almost reciprocal course. 2. There are two towing vessels. The one in the center is towing behind it a length of tow that does not exceed 200 meters. The one on the right is towing alongside (the tow is secured by cables or heavy warps to the side of the towing ship but is not rigidly constructed as a composite part of the towing vessel). 3. Five vessels or more are involved. You see four of them, however the one in the center is towing at least one vessel behind it. 4. Yes, you are on a possible collision course
with both the vessel in the center and to the right. 5. You should turn to port. v 1. You see three separate situations. The one on the left is crossing your bow from port to starboard, the one in the center is coming at you dead on, and the one slightly to the right is also coming at you almost dead on. 2. All three are tow situations. The vessel on the left is pushing another vessel ahead of itself, and they are not rigidly attached to each other. The vessel in the center is most likely also to be pushing a tow ahead of itself, although it might also be pulling an unusually wide tow behind it. The vessel on the right is towing one or more vessels behind it, the tow being over 200 meters long (which is the reason for the three white lights on its forward mast). 3. At least six vessels. 4. Yes. 5. Turn to port, so the left pushing vessel would be out of your way by the time you reach its present location.

## States Of Mind (Page 54)

1. Arizona. It's sufprising how many people think the Grand Canyon is in Colorado.
2. New York. This map was drawn in 1897. Harlem River is the clue.
3. Michigan. Where Upper and Lower Peninsulas meet.
4. Virginia. Civil War buffs are likely to have known this one.
5. Wyoming. Devils Tower, now a national monument, was a famous landmark in pioneering days.
6. Illinois. Large-scale map of a small town near where the Missouri River joins the Mississippi. This was a toughie, no doubt.
7. Montana. Lewis and Clark slept here. The three forks are the Madison, Jefferson, and Gallatin rivers, which join to form the Missouri.
8. Oklahoma's OK. Anything else is pretty dumb.
9. Washington, D.C. Not a state, and we'll bet the state names in the avenues didn't fool you.
10. Pennsylvania. Conestoga River may sound like the old west, but Pennsylvania's where the prairie schooners came from.
11. South Dakota. As everyone knows, that's where Sitting Bull was buried (see \#14). Mobridge is short for Missouri Bridge.
12. Texas, near the old Rio Grande.
13. Iowa, another toughie, taken from the edge of a map.
14. North Dakota. As everyone knows, that's where Sitting Bull was buried (see \#11).
15. Kansas. Matt Dillon of old Dodge City would have known this one.
16. Idaho. Sun Valley is the clue, not Atlanta, of course.
17. The Moon. Copernicus Crater. Did you guess it? (Not yet a stake.)
18. Alaska. Seldovia was an old Russian settiement.
19. Louisiana, the only state whose counties are called parishes. The view is of the Mississippi going out to sea. 20. Colorado. Crooked clues were Idaho and St. Louis. Mining, "Boulder'", and high altitude were the straight clues.
20. Missouri. Mark Twain plus the unique lettering system of highways add up to a right answer
\# 1 Armchair Safari (Page 25)

| CH] NA | WAD | TOAST |
| :---: | :---: | :---: |
| LICIT | \|RE | UNDIE |
| ELEPHA | ANTS | BEARS |
| FTS EG | G | A GE |
| KI NE | E SR | BEDS |
| WANS | STE | REO |
| ATE | UE | TOLID |
| EXERCI | SEM | ACHINE |
| MYSTI | PA | OGRE |
| C | EN | OHOS |
| $V I S A R$ | AN | Os |
| NA | D |  |
| 4 B | Mo ${ }^{\text {T }}$ | RB।K |
| PEES | ERA | CAN |
| TRIA | NAG | EDGES |

\#4 Boys of Summer (Page 31)

\#7 Lots of Luck (Page 39)

\#5 Pioneering Spirit (Page 31)



## Crazy Quilt U.S.A. (Page 28)




Plumber's Problem (Page 34)


1. WHALE HAVING A HICCUP
2. CENTIPEDES SHAKING HANDS

## Cine-Maze (Page 28)

1. LADY (Funny Lady)
2. INFERNO (Towering Inferno)
3. MARRIAGE (Scenes from a Mar riage)
4. PEPPER (The Great Waldo Pepper)
5. ALICE (Alice Doesn't Live Here Any More)
6. INFLUENCE (A Woman Under the Influence)

## LENNY (Lenny)

8. DETAIL (The Last Detail)
9. BICYCLE (The Bicycle Thief) 10. PIECES (Five Easy Pieces) 11. SEDUCTION (The Seduction of Mimi)
10. TANGO (The Last Tango)
11. WEEKEND (The Lost Weekend) 14. WIND (Gone With the Wind) 15. POSEIDON (The Poseidon Adventure)
12. SUMMER (Summer of '42)
13. SPLIT (California Split)
14. SUPERSTAR (Jesus Christ Super star)
15. PLANET (Planet of the Apes) 20. PAPER (Paper Moon)
16. TALL (Walking Tall)
17. DOLPHIN (Day of the Dolphin)
18. KID (The Heartbreak Kid)
19. DRUM (Bang the Drum Slowly)
20. GREEN (Soylent Green)
21. ROLLING (The Rolling Stones)

## Evenings that memories are made of so often include DRAMBUIE.



Growing Crazy (Page 26)
 MAAGULE A I GLMZE PWQXN/Z $P$ PRB $F T D$ T H X GAVE NDEA A
 DQLI IE BAHMONEHOGBVQH


 C. HRYYSA N T/HEKUMPS N AP B/M
 Y A P F TEAM O B G M H T T S Z L P S SPPVXAR D R U P

 D/AFFOD I LSPZ EV OT OASRCN

Find the Presidents (Page 26)
$P$ ER $S$ RELY(T)YLRPSONPG1O (POLK)S YATNDNALEVELODG TRUA GEAANA N I Y Y DENNEEKG



 $S T H A R D T M G R A J O A H N S O N B W$
 O SON M ROU P F RNOOC E O I OT


 A(W)FMNOS IRRAHBUBRVKAE HOO E (NAMURT)HMFHK I TOAXB

## Note-Able People (Page 30)

S)HRBGDONTQSVDCXGHPLJMKNVWZLCRIHNOSP 5 EFLGPKMQOWALLANKUBENSTEINJUNIORQSVYJJ LXLMQRXPAULSIMONGMPZCIFFARTATMGFELT/OL GIROSEVEVTFKNADIILNWFGHCADBZTQXVRTA/O/H/AL ABOTSRENOOZGEORGEYKCIMMIZNODGARBMNLEN E $L$ OTHOSTZUBENSOONDKAKEBONNIERRAITDEDHRQO I KRAPEUUI PPERPWETIMUB(LINDAARONSTADTLAPL EXAMETNBNNOTXTZFRQDTANADSTLICCKSHOOPER MURDAL(A)PREHSTEEVITEWONDEXTONLLAEVAHEWWON STFCDXDZOOMERETRAIIYLONOUNTIIZZAERSIEH YDDDUMOLCUDLBLMERNRKOB BOFYNXIKRREDDJY


 MSSSPLECDRESUSSXA SHRYOUNGNZNCBUVBZOAUP ATTAYLORDDSEVERCNH ANTURESUNEXXVDZXQLTE NECEILGSTANZGADEALLASEGNATSSURAPRVSTNLL BROSH TMORFLI ATEDNOMOLOSFOTNEMEJDUJLEI NIEOOUSPQZDLPIKRENSRAEPHPETERFRAMPTON

## Be a Sport (Page 30)

AEKA RELLIMNMCYANBGOEATRTDNGBLQOZZLEAN SARWBMEAPSYNTHHO DPGFORLHLTE I Z DRR(R)ENEE)WP HRSIBSGGFAFTEDEEAIBYIEAARKNGPUO|IAI TGNV SPYEARAJDEQUARSLNBMSOIWJNDRZSNN|CTNQYUB
 1.A.JNI JOPNLZQSHEBENSTCAHOTELCXNRTI GFMO NREMLAPDLONRAHPSAMSIEOPNRBDZMADMARKZE P(NALTFRAZIEA)NOQCGRATGHNNVEOFQQ(STPITZ)XL CNINLQZDVEELSBUSETIBOATNWCSAOZVCPTREM E ABZPNOONMOHAMMADALDKAUSONMMSGCTSOMIC RFFEOEREMYNVSLEVIPPECBONIBRQLVETREXTXR LFLDLVNAABARYRSEI NEYRAC YOIS JUDLEMMEEHE
 TUBROGOEEMWCXSWXAYLAECOAEFAY LN I EESSETS

 DARABSO JN B O P M N C V J E A, I H G O Z A B D O C C M R H M B I T

Phrase-Maze (Page 34)


Friends are people who borrow my books and set wet glasses on them.Edwin Robinson

## Non-Periodic Tessellation (Page 32)




The Fonz and Friends (Page 36)


## Crypto-Search (Page 40)

A. Stream, Master C. Refeather, Hereafter D. Filter, Trifle
E. Day Broke, Keyboard E. Day Broke, Keyboa G. Spared, Spread H. Secure, Rescue . Scoured, Coursed i Scoured, Coursed K. Retrain Teen, Entertaine L. Thread, Dearth M. Altitude, Latitude N. Rascal, Lascar O. The Man, Anthem P. Sistered, Resisted Q. Train Asp, Aspirant R. No Bore, Oberon S. State Dims, Misstated T. Meal In Tray, Alimentary U. Porter, Report


# WHEN YOURE NOTINA RUSH TO CATCH UP 

 YOUVE GOTHE TIMETO BUIID THINESRIGET:

THE SXI250.

At Pioneer high fidelity, wéve always made it a habit to try and introduce incredibly refined high fidelity components long before our competition.

Last year, for example, we brought out the interesting little item shown above. The Pioneer SX1250. The world's first truly high powered receiver. With the unique ability to crank out 160 watts per channel.

Naturally, the SX1250 caused quite a stir. And it caused our competition to hastily introduce a bevy of their own high powered receivers. But unlike the others, the SX1250 wasn't thrown together in a hurry. And the time and care that went into it can both be seen and heard.

Inside, for example, you'll find that we took the time to shield every critical section fromelectrical interference. So things like your neighbor's CB broadcasting won't interfere with your listening.

Our pre-amp circuit was designed with the unheard of phono overload level of 500 millivolts. Which means that the loudest, most
dynamic section of any record won't sound distorted.

And where most high powered receivers come with a three, or four gang variable capacitor for FM tuning, the SX1250 features a five gang zinc plated variable capacitor that cleans up FM reception much better. And helps to pull in stations that some three or four gang capacitors can't even touch.

Obviously, as a quick glance at all the buttons and dials above will tell you, these are only a few of the refinements that went into the SX1250.

But the important point is that no matter which Pioneer receiver you buy, you can be guaranteed that it got the same amount of time and energy that went into building the SX1250.

That's what's made our high fidelity receivers number one today with people who care about music.

After all, when you take the time to build things right, people Hen Highideliry Components tend to hear about it. WE BRINGITBACKALIVE:



[^0]:    The Tibetan world view is illustrated in the Wheel of Life, which shows the functioning of karma and the process of continuing rebirth. The Wheel of Life is a picture of sämsāra, the world of birth and death; in it the myriads of living beings are classified in five types, each demonstrating a state of mind that has given rise to that type. It depicts the renewal of existence in twelve symbolic pictures around its edge.

    The cycle of birth and death, sämsāra, is painted between the jaws of Māra, lord of this realm, here symbolizing impermanence. Within the spokes of the wheel are represented the five major karmic destinations: two above, three below. The higher destinies are god, asura, and human beings. The happiest state is that of the devas, gods of the world of sense desire, whose lives are continual pleasure and sensual delight mitigated only by the fact that they must eventually die and pass to another state.

